PCAuthorize®

User's Guide

Version 1.1

Tellan Software, Inc.

Disclaimer

Tellan Software, Inc., makes no warranties, either expressed or implied, regarding the enclosed computer software package, its merchantability, or its fitness for any particular purpose. Tellan Software, Inc., does not warrant that the functions contained in the software will meet your requirements or the operation of the program or any updates will be uninterrupted or error-free.

The liability of Tellan Software, Inc., under the warranty set forth above shall be limited to the amount paid by the customer for the program license. In no event shall Tellan Software, Inc., be liable for any special, consequential, or other damages for breach of warranty. In no event shall Tellan Software, Inc., be liable for any damages whatsoever (including, without limitation to damages for loss of business, loss of profits, business interruption, loss of information, lawsuits, or other pecuniary loss) arising out of the use of or inability to use the program.

The exclusion of implied warranties is not permitted by some states. The above exclusion may not apply to you. This warranty provides you with specific legal rights. There may be other rights that you have which vary from state to state.

Unlawful Software Duplication

PCAuthorize® software and User's Guides are protected under copyright law. Unlawfully copying, duplicating, selling, or otherwise distributing these products is hereby expressly forbidden.

Warranties, updates, and user support will not be honored for any program which has been unlawfully copied.

PCAuthorize is a registered trademark of Tellan Software, Inc., San Jose, CA

Other trademarks and registered trademarks are owned by their respective companies.

The information in this document is subject to change without notice.

Part Number: 2001
Revision Number: 1.1a
Printing Date: May 1999
Tellan Software, Inc.
2680 S. White Road, #160
San Jose, CA 95148

©1996-1997, 1999 Tellan Software, Inc. All rights reserved under Pan-American Copyright Conventions. Printed in the United States of America. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopy, recording, or otherwise, without prior written permission from Tellan Software, Inc.

Contents

Section 1: Getting Started 1
Welcome to PCAuthorize® 1
Credit Card Awareness 1
Preventing Fraud 2
Installing PCAuthorize® 3
System Requirements 3
What You Need to Know Prior to Installing PCAuthorize® 3
Installing PCAuthorize® on Your Hard Drive 3
Plug-In Modules 4
Transact Directory 4
Getting Help, Icons, Shortcuts, and Demo Mode 5
Help Window 5
Technical Support 5
Icons 5
Shortcuts 5
Demo Mode 6

Section 2: Setting Up PCAuthorize® 7
Hardware Setup 7
Modems 7
Magnetic Stripe Readers 7
PIN Pad 8
PCAuthorize® Setup 8
Intro Setup 9
Communications Setup 10
Merchant Setup 13
Receipts Setup 14
Services Setup 16
Card Types Setup 18
Addenda Setup 20
Administrative Setup 22
Personal Setup 24
PIN Pad Setup 27
Split Dial or Additional Network Setup 28
Multiple Merchant Setup 29

Multiple Bank Network Plug-In Setup 32
Section 3: Transactions 33
Before You Enter a Transaction 33
Opening the Transaction Window 34
Transaction Window Navigation Techniques 35
Entering a Transaction 35
Card Type 35
Transaction Type 35
Entry Items 37
Address Verification 38
Message Box 39
Entry Mode 39
Force Duplicate 39
Credit Card Magnetic Stripe Authorization 39
Credit Card Manual Entry Authorization 40
Check Guarantee MICR Authorization 40
Check Guarantee License Authorization 41
Authorizing an Entire Batch 42
Discount Rates 42
Retail Businesses 42
Mail-Order and Direct Marketing Businesses 43
Purchase Cards 43
Corporate and Business Cards 43
The Transaction List Screen Contents 44
The Command Bar 44
Transaction Titles 45
Transaction Line Items 45
Selecting a Transaction 47
Voiding a Transaction 47
Changing a Transaction 48
Deleting a Transaction 48
Finding a Transaction 49
The Totals Screen 50

Section 4: Batches 53
Handling Batches 53
Handling Transactions within Batches 53
Batch List Screen 54

Opening an Existing Batch 55
Deleting a Batch 56
Selecting the Batch Contents List 56
Authorizing a Batch 57
Intermixing Batch and Single Authorizations 58

Section 5: Settlement 59
What is Settlement? 59
Settlement Types 59
Settlement Procedures 60
Interactive Balance 61

Section 6: Reports and Troubleshooting 63
Reports 63
Troubleshooting 64

Section 7: Network-Specific Instructions 67
American Express 68
ECHO Network 72
FDMS North – Card Establishment Services 74
FDMS Nashville – Envoy 76
FDMS South – NaBanco 78
FDMS – Omaha ETC Plus 81
FDMS – TeleMoney 83
Paymentec – Gensar 85
Global Payment – NDC (Host Capture) 87
Global Payment – MAPP 91
Global Payment – Modular Data 95
Nova 97
VisaNet 99

Glossary 101

Appendix A: Exchanging Information 107

Appendix B: Interapplication Communication 117

Index 133

Section 1: Getting Started

Welcome to PCAuthorize®!

Before getting started, please review any information provided by your bank. Information or instructions provided by your authorizing agency or merchant bank always take precedence over instructions in this manual.

> *Note*: If you are a new user of Windows, you need to learn about using the mouse, working with disks, and other Windows conventions. Refer to your Windows documentation for this information.

You may press the **F1** key to obtain help in almost every window.

Credit Card Awareness

PCAuthorize® is designed to process credit cards and ATM/Debit cards and to obtain check guarantees. Before processing a transaction, you should be aware of your responsibilities in accepting credit cards and ATM/Debit cards. Credit cards acceptance practice requires the following:

1. The cards must be either manually imprinted or swiped (slid through the card reader).

2. Keying in transactions manually can raise your discount rate and increase the risk of fraud. Swipe cards through the card reader to maintain the lowest possible rate.

3. The cardholder must sign the charge slip or printed receipt.

4. The transaction batch must be closed daily.

> *Note*: If you do not obtain the cardholder's signature on the swiped on manually imprinted paperwork, you may lose your chargeback rights. MasterCard and Visa require you to save this paperwork in date order for at least three years.

Preventing Fraud

When you accept a cardholder's credit or ATM/Debit card you should:

- Compare the signature on the cardholder's ID with that on the back of the credit card and on the receipt.

- Check the appearance of the card to see if it has been fabricated or tampered with. Uneven numbering, a false logo, or a hologram that doesn't "move" can all be signs of a counterfeit card.

- Compare the number embossed on the card with the number printed on the sales slip; altered account numbers often show ghosted images.

- When accepting a Visa card, check the printed bank ID number above the account number. The four-digit prefix number should match the first four digits of the embossed account number.

- If the card doesn't read when you slide it through the card reader and you must key the numbers in manually, you must use a manual imprinter. Even when the printer prints a receipt, the customer must sign both the printed receipt and the manually imprinted slip. The two slips should be stapled together.

- Check both the start and expiration dates on the card. The card is not valid before the start date or after the expiration date.

- If you are instructed to recover a card, attempt recovery by reasonable and peaceful means. Notify your voice authorization center of whether you were able to retrieve the card.

Installing PCAuthorize

System Requirements

PCAuthorize® runs on any Windows system, including 3.11, NT and 95. Be sure you have the correct version for your Windows system.

An asynchronous modem is required to connect to the authorizing agency or bank. Bank networks operate differently from most consumer networks. Most commercially-available modems should work with PCAuthorize® and your bank network; however, we cannot guarantee it.

If you are authorizing transactions when the cardholder is present, you should also purchase a magnetic stripe card reader for your PC.

What You Need to Know Prior to Installing PCAuthorize®

You *must* know which bank network you will be using! If in doubt, call your merchant service provider.

You may need an installer password to enable installation for your particular bank network. This should either come with the package, or be provided by the person installing your software.

Installing PCAuthorize® on Your Hard Drive

1. Insert the PCAuthorize® Disk 1 into your disk drive.
    - If you are installing under Windows 95 or NT 4.0:

      Select **Run** from the taskbar Start menu

    - If you are installing under Windows 3.11 or NT 3.5:

      From the Windows Program Manager, select **Run** from the File menu

2. Type **a:\setup** and press the **Enter** key (or **b:\setup** if the diskette is in drive b).

3. Check the bank network you wish to install. Only one network may be chosen. Be sure you check the correct one.

4. Check the split dial plug-ins (American Express, Equifax, etc.) *only* if you have made arrangements to connect *directly* to their network. Most major networks already handle these transaction types.

5. You may be asked for a password to enable you to install certain items. Key in your password and click **OK**. If you don't know your password, check with your merchant service provider or call Tellan Software at 800-4-TELLAN.

6. A new program group and directory named TELLAN will be created automatically on your hard drive. Within that directory will be a PCAuth folder. Open the folder and double-click on the PCAuthorize® icon.

Plug-In Modules

Plug-in modules are usually automatically installed; however, depending on your supplier of PCAuthorize®, you may also receive a plug-in diskette. Plug-in files always end in .PLG. The plug-in files provide PCAuthorize® with specific instructions on how to connect with your particular bank or authorizing agency service. Some plug-in modules also add functionality to PCAuthorize®.

Transact Directory

All transactions are stored in a directory called Transact, which is normally a directory within the PCAuthorize® application directory. You may move this directory elsewhere using Windows or other utilities. If you do so, you must also change the directory path name on the Personal Setup screen. For additional information, see the section entitled "Personal Setup."

Getting Help, Icons, Shortcuts and Demo Mode

Help Window

You may display help information by pressing **F1** from almost any window. If a window is currently open when you ask for help, then a help window will open for the subject pertaining to that window.

Technical Support

Technical support may be provided either by your merchant bank or by Tellan Software. Instructions from your bank will indicate whom you should call for technical support.

Icons

The following PCAuthorize® icons may appear in Windows:

PCAuthorize® application

Transaction files found in the Transact directory

Shortcuts

As in most Windows applications, you may issue PCAuthorize® commands by making selections from the pull-down menus at the top of the screen. Many menu items are duplicated as buttons in the PCAuthorize® windows.

Many of the frequently used menu commands may be issued from the keyboard by holding down the command key and then a specific character. Any menu that has a command symbol (**Control**) and a character on the right can be issued from the keyboard.

Demo Mode

Demo mode allows you to practice entering transactions with PCAuthorize® without actually affecting anyone's account.

When you are in demo mode transactions are stored in a normal manner; there is no distinguishing factor other than how the transaction is authorized. Do not intermix the demo and normal modes during normal working procedures.

When you authorize a transaction using demo mode, PCAuthorize® displays a canned response according to the value of the last cents position:

- 2 returns a Decline
- 3 returns a Referral
- 4 returns an Error
- 5 returns a Hold Card

All others will be Approved.

You may access demo mode by selecting **Demo Mode** in the Agency Access field in the Communications Setup screen.

Section 2: Setting Up PCAuthorize®

Hardware Setup

Modems

PCAuthorize® supports most Hayes-compatible asynchronous modems. Some modems, however, cannot connect to banks' networks, so we cannot guarantee all modems will work. This is typically a hardware problem between the modem and the network, and not directly related to the software.

Follow the instructions from the modem manufacturer in connecting the modem to your computer. For more information about modem setup, see "Communications Setup."

Magnetic Stripe Card Readers

PCAuthorize® supports most magnetic stripe card readers which connect via the keyboard port. Both track 1 and/or track 2 readers are supported. PCAuthorize® requires that the reader be configures to send "start and end sentinel" characters. Most, but not all, readers come configured properly from the manufacturer.

If you are having problems with a magnetic stripe card reader, ensure the following:

- You must have a batch open prior to swiping the card. When the card is swiped, PCAuthorize® creates a new Transaction window and positions the cursor to the Amount line.

- Ensure the reader is configures to send "start and end sentinel" characters. Usually this is done by setting certain dip switches on the reader. Refer to the manufacturer's installation instructions.

- Some readers may "overrun" your computer; i.e., transmit more characters than can be accommodated by the buffer. Many readers have a dip switch option to slow the transmission rate to your computer. Again, refer to the manufacturer's installation instructions.

PIN Pad

PIN Pads are used for ATM/Debit cards only. Not all versions of PCAuthorize® support PIN Pads and debit cards. PCAuthorize® supports several popular manufacturers, including Verifone.

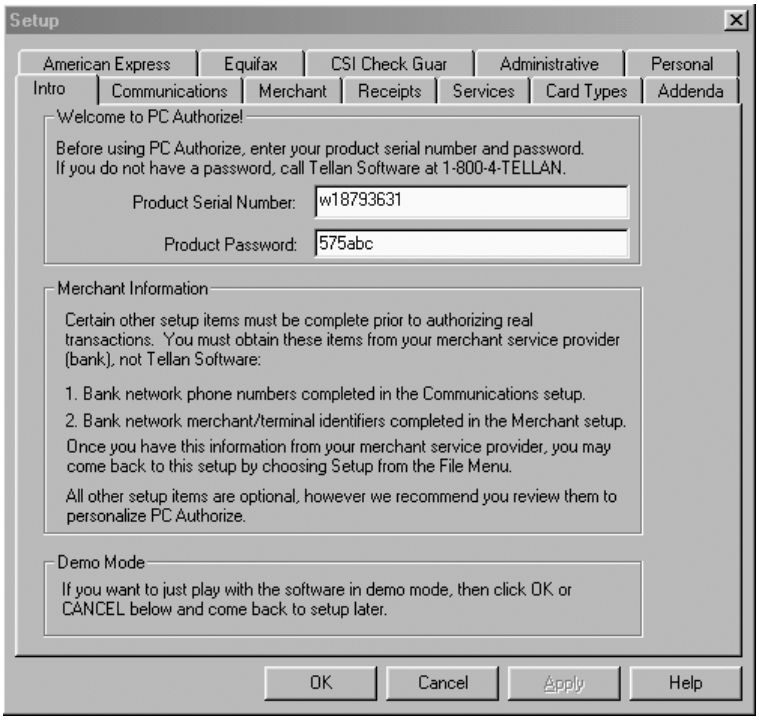
The PIN Pad is attached to a serial port on your computer. For more information, see the manufacturer's installation instructions and "PIN Pad Setup."

PCAuthorize® Setup

Prior to using PCAuthorize® to authorize transactions, you must complete certain setup items. Review the network plug-in documentation and instructions from your local bank for additional information. Setting up PCAuthorize® doesn't take long—just follow these guidelines.

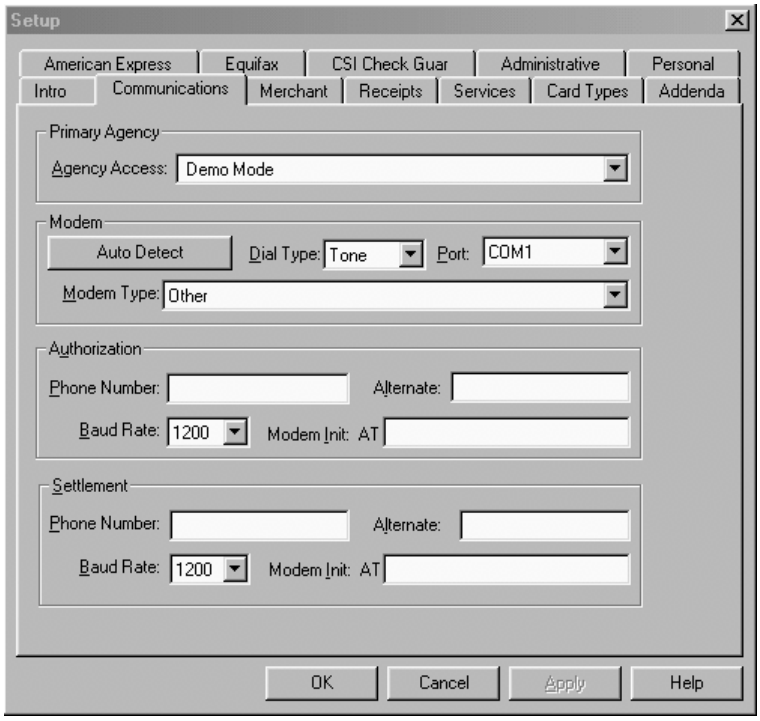
When PCAuthorize® is first opened after installation, a Setup menu displays. You must complete the first three Setup menu items (**Intro**, **Communications** and **Merchant**) prior to authorizing real transactions. All other Setup menu items are optional and may be completed according to your needs.

Intro Setup


Setup
American Express
Equifax
CSI Check Guar
Administrative
Personal
Intro
Communications
Merchant
Receipts
Services
Card Types
Addenda
Welcome to PC Authorize!
Before using PC Authorize, enter your product serial number and password.
If you do not have a password, call Tellan Software at 1-800-4-TELLAN.
Product Serial Number:
w18793631
Product Password:
575abc
Merchant Information
Certain other setup items must be complete prior to authorizing real transactions. You must obtain these items from your merchant service provider (bank), not Tellan Software:
1. Bank network phone numbers completed in the Communications setup.
2. Bank network merchant/terminal identifiers completed in the Merchant setup.
Once you have this information from your merchant service provider, you may come back to this setup by choosing Setup from the File Menu.
All other setup items are optional, however we recommend you review them to personalize PC Authorize.
Demo Mode
If you want to just play with the software in demo mode, then click OK or CANCEL below and come back to setup later.
OK
Cancel
Apply
Help

You must enter a valid Product Serial Number and Product Password prior to authorizing transactions. The Product Serial Number is printed on your diskette and Warranty Card. Your Product Password is enclosed with your PCAuthorize® shipping package. If you do not have a Product Password, call Tellan Software at 800-4-TELLAN. Have your Product Serial Number, bank network name, and bank merchant information ready when you call.

Communications Setup



This screen allows you to set up the modem communication information. Generally, this information must be provided by your authorizing merchant bank. It may already be set up to work with their system.

> *Note*: If you are using multiple authorizing agencies, such as American Express, additional communications windows may be displayed.

Agency Access—Select the authorization agency indicated by your bank. You may also select **Demo Mode** to practice entering transactions or demonstrate PCAuthorize®. For additional information, see "Demo Mode" in Section 1.

> *Note*: Never mix real transactions and demo mode transactions in the same batch.

Auto Detect—This option causes PCAuthorize® to attempt to automatically set up and configure your modem by scanning your system and checking for modems attached to serial ports. If a modem is found, the system then attempts to configure the modem. If no modems are found, then you must manually configure the modem by selecting the appropriate serial port and modem type. If your computer locks up during the scanning phase, restart and manually configure the modem.

Dial Type—Set the dial type, either **Tone** or **Pulse**, for your local telephone system. This should generally be set for Tone in most areas of the United States.

Port—Select the Windows port to which your modem is attached. This may be any of the COM1-type ports.

Modem Type—Select the modem manufacturer and model of the modem you are using. When you select a particular modem, the baud rate will be forced to 1200 and the Modem Init string will be completed with the appropriate information for most bank networks. If your modem is not listed, select **Other** and complete the Modem Init string as explained below.

Phone Number—Type in the telephone numbers of the authorizing bank computer. Obtain these numbers from your merchant bank. If you received only one authorization telephone number, enter it in both the Authorization and Settlement fields.

Baud Rate—Set the baud rate as indicated by your merchant bank. Most banks operate at 1200 baud. Different baud rates may be selected for authorization and settlement. Check your bank network plug-in documentation for additional details.

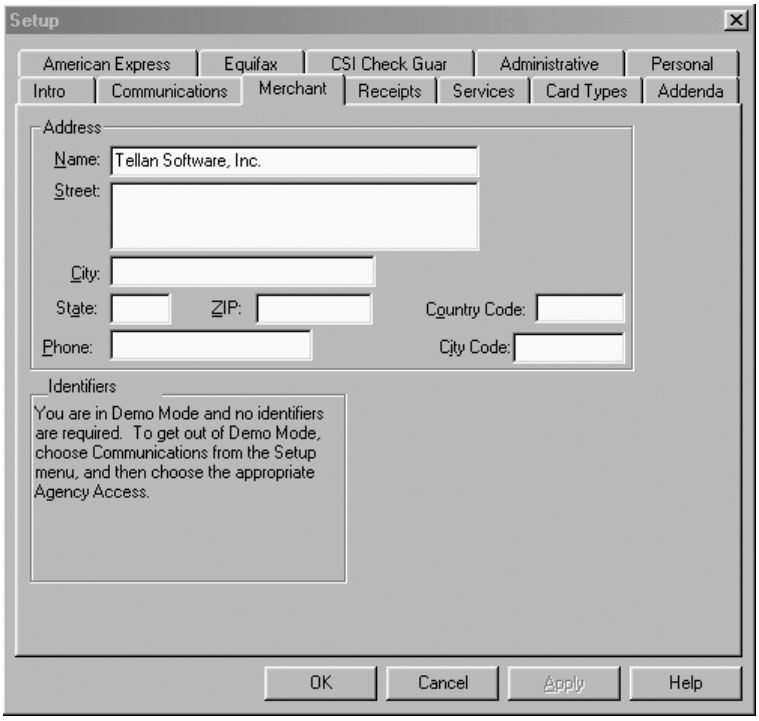
Note: If you select certain modem types, the Baud Rate and Modem Init fields are generally set for you.

Modem Init—Enter the appropriate AT modem commands (without the AT prefix). Consult your modem user's manual or call your modem manufacturer for further information.

Bank networks operate differently from most consumer networks. Most bank networks require the following modem configuration:

- Bell 212A asynchronous (1200 baud)
- No error correction or compression
- No negotiation
- No additional features or feature negotiation

Merchant Setup



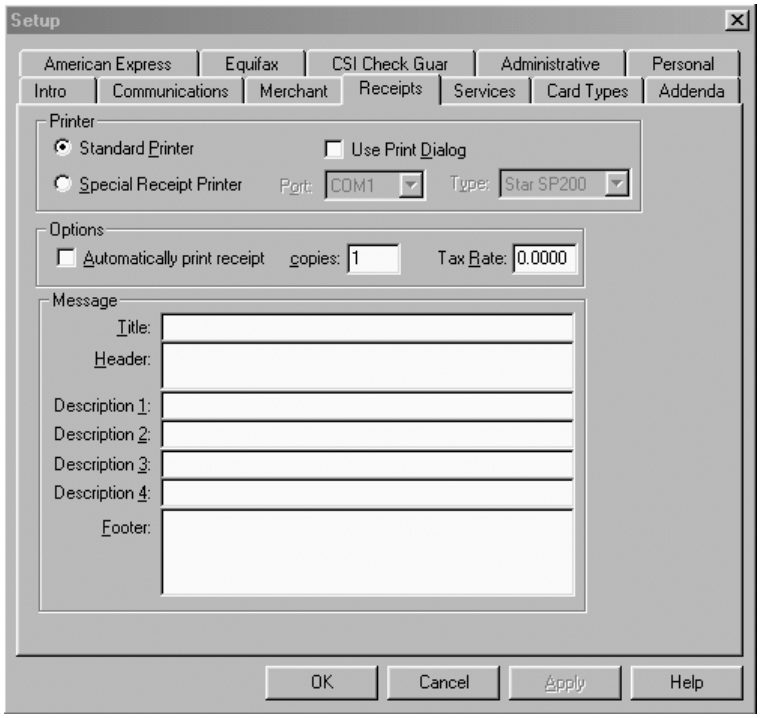
This setup screen enables you to enter all your merchant and store-identifying information.

The first section of the screen contains standard name and address information. You must complete this information in order to properly print receipts and reports. Enter the name, address, city, state, zip code and telephone number of your store or merchant location. Enter a country and/or city code if supplied by your authorizing bank.

> *Note*: If you are using multiple authorizing agencies, such as American Express, additional merchant information windows may be displayed.

Other sections contain information provided by your authorizing bank. The content of this section varies, depending on the bank network. See your bank network plug-in documentation for further instructions.

Receipts Setup



The Receipts screen contains optional items which do not directly affect credit authorization. We recommend, however, that you complete the fields on this screen.

Printer

You may print receipts on either a **Standard Printer**, or on a **Special Receipt Printer**. Select the type of printer you will be using for receipts. If you select the Standard Printer, any Windows printer may be used. If you select the Special Receipt Printer, you must complete the **Port** and **Type** fields. We recommend you select Special Receipt Printer for small, serial receipt printers.

If you want a print job dialog box during receipt printing, then select **Use Print Dialog**; otherwise, PCAuthorize® will automatically print receipts with no dialog.

Options

You may have PCAuthorize® automatically print a receipt if a transaction is approved by checking the **Automatically Print Receipt** field and entering the number of copies to be printed in the **Copies** field.

PCAuthorize® can also automatically calculate the sales tax if you enter the sales tax rate in the **Tax Rate** field. This rate should be entered as a percentage.

Message

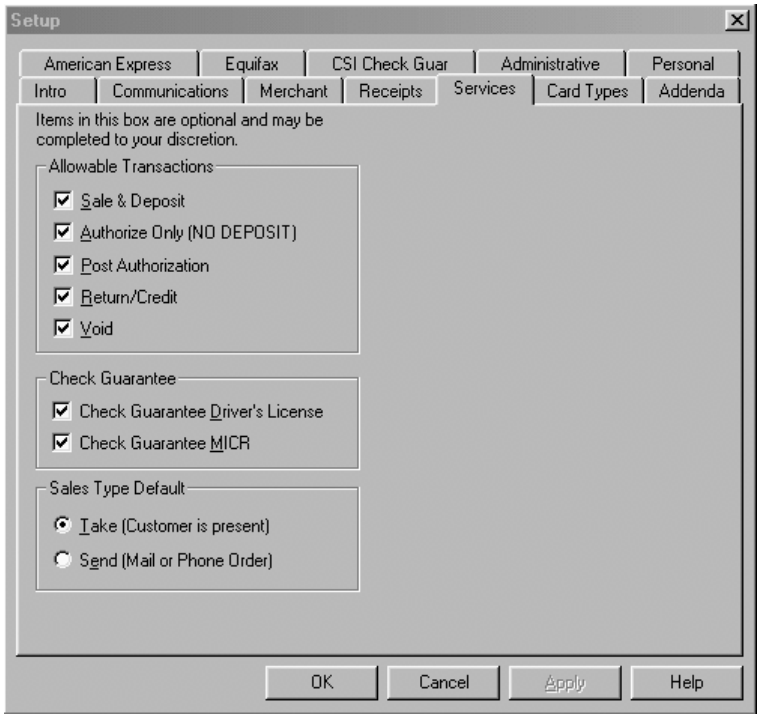
This section of the screen allows you to:

1. Specify the standard heading and special messages which will be printed on the receipt. The header portion will normally contain your business name and address, and is automatically set to do so. The footer may contain any message you wish. The items are limited to the following:

    - Title—One line of up to 40 characters
    - Header—Two lines of up to 40 characters each
    - Footer—Four lines of up to 40 characters each

2. Specify the default description to be applied to each transaction. Each description may be a maximum of 20 characters. When you open a new transaction, the description lines are automatically set based on these default descriptions. You may change these in the transaction entry window for each transaction.

Services Setup



This setup screen allows you to select various items that may be entered on the transaction entry window. Allowable transactions are dictated by your authorizing bank.

Allowable Transactions

To enable entry of a transaction in the transaction entry window, enter a checkmark adjacent to any of the following transaction types:

- **Sale & Deposit**—Allows you to enter regular sale and deposit transactions.

- **Authorization Only (NO DEPOSIT)**—Allows authorization-only transactions (non-draft capture).

- **Post Authorization**—Allows posting of telephone authorizations to the batch. Post Authorizations are used when a telephone call is made to the issuing bank to obtain an approval. If the transaction is approved, you may enter it into your batch even though it was not authorized electronically by PCAuthorize®.

- **Return/Credit**—Allows entering credit (refund or return) transactions to the batch. Returns are normally entered the next or following day after a transaction is authorized.

- **Void**—Allows entering a void transaction.

Check Guarantee

Select either (check with your authorizing bank to see which form, if any, of check guarantee transaction may be used):

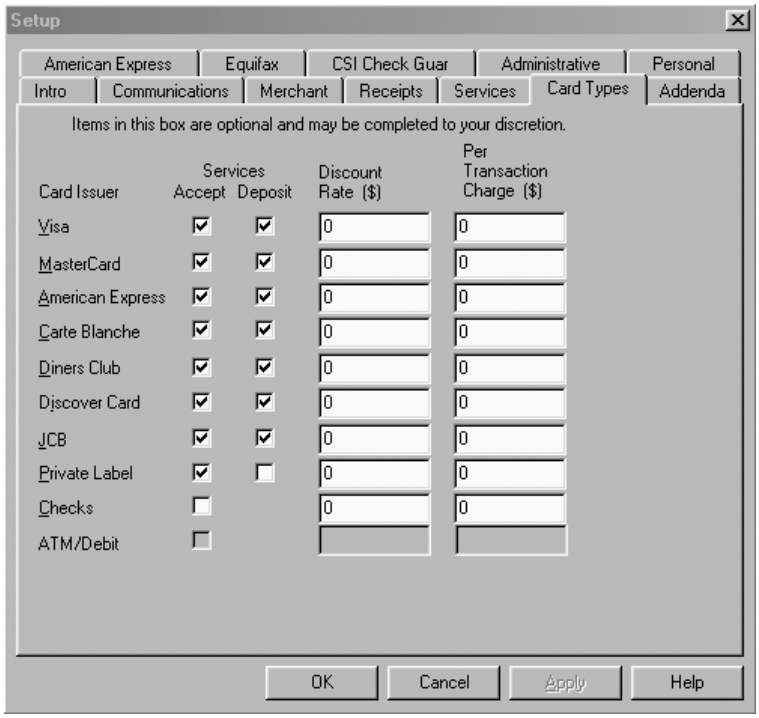
- **Check Guarantee Driver's License**—Allows entering a check guarantee using a driver's license.

- **Check Guarantee MICR**—Allows entering a check guarantee using the check MICR number.

Sales Type Default

Select the default, either Take or Send, for the type of sales you will be making. This option may be changed for each transaction, as necessary.

Card Types Setup



The fields on this screen are optional and do not generally affect authorization.

Services

Most bank networks accept all major credit cards, but may limit the card types accepted by your business. The Services fields allow you to prevent entry of the credit card types you do not accept.

Check each box if you plan to accept and/or deposit the card type shown. Normally, card types you do not accept will be rejected by the bank network upon attempting authorization. Entries on this screen allow you to terminate the transaction before processing proceeds to that point.

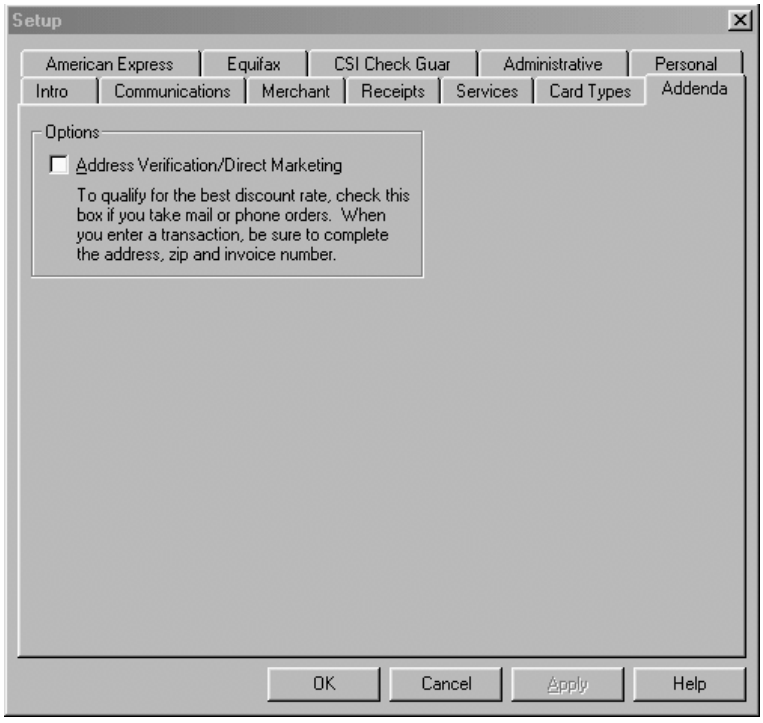
Discount Rate and Per Transaction Charge

You may enter your Discount rate and/or Per Transaction Charge for each card type. This allows you to display totals of what you will be making from the sale.

Enter both amounts I dollars; e.g., a discount rate of 2.4 percent would be entered as .024.

The discounted totals for a particular batch are shown on the Totals screen by card type.

Addenda Setup



Options

The Addenda screen allows you to append certain information to the transaction when it is authorized. The information allowed depends on the authorizing agency you are using. If the authorizing agency cannot handle the information, or you are not configured properly, the Addenda check boxes will be “grayed” and you will be unable to enter information. Check with your authorizing bank to confirm which options you may use.

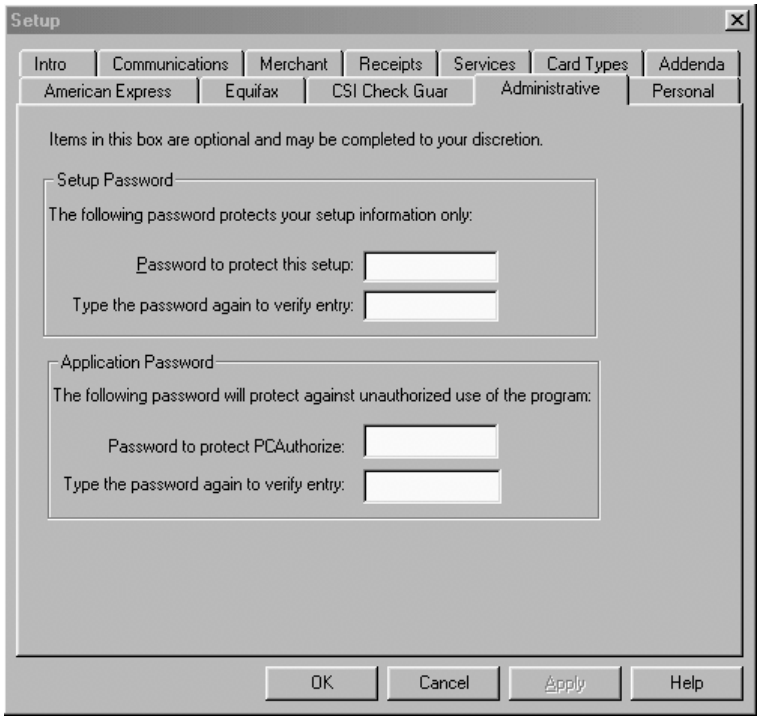
Address Verification/Direct Marketing—Address verification is used primarily by mail-order businesses as a double check to ensure that the card has not been stolen. It does not affect whether the transaction is actually authorized, but returns a status message on how close the address to which the purchase is to be sent matches the cardholder’s address.

The bank network plug-in software will only send address verification to the network if either the Zip and/or Address fields are entered in the transaction screen. Prior to authorization, the Zip code and address will display in the Transaction List screen under the Addenda column. After authorization, a special verification response code from the network will display in the Transaction List screen, indicating the results of the verification.

Most networks return the following AVS response codes:

Code	*Description*
X	Exact match, including 9-digit Zip
Y	Exact match including 5-digit Zip
A	Address matches, Zip does not
W	9-digit Zip code matches, address does not
Z	5-digit Zip code matches, address does not
N	Nothing matches
U	No date from card issuer
R	Retry
S	AVS not supported for this merchant
E	Error, AVS not supported for this industry

Administrative Setup



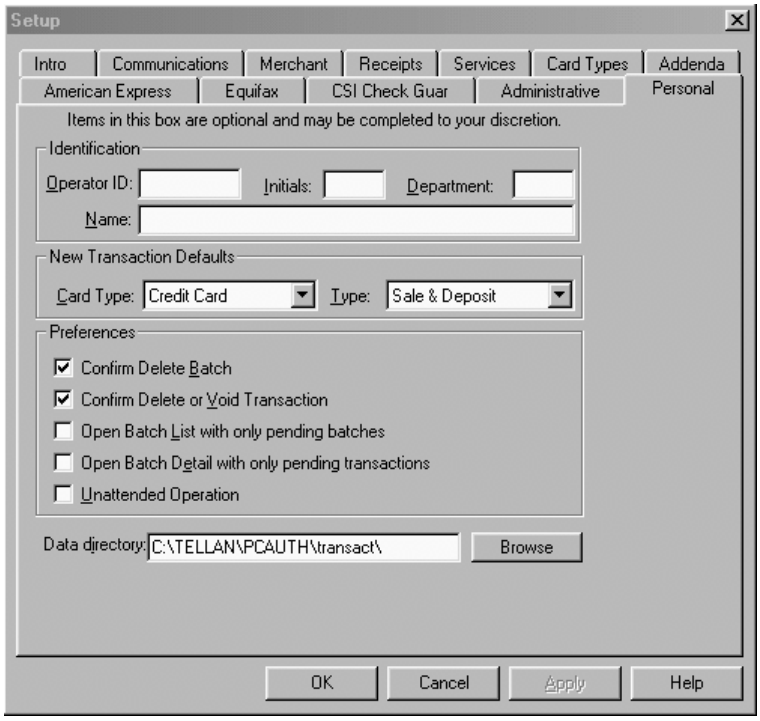
This screen allows you to protect your setup information and/or application. **Setup Password** will not allow anyone to view or change setup information without a password. **Application Password** will not allow anyone to open PCAuthorize® without a password.

This setup screen is usually completed by a manager or key employee to limit the access other employees may have to PCAuthorize® and/or functions within. We recommend that you set this feature when no other employees are present.

To protect either the application or the setup, enter a password in the appropriate password text field. You must enter it twice to verify the entry. Passwords may be a maximum of 8 characters.

Once Setup is protected and is selected from the File menu, a window will display requesting the password. If the appropriate password is entered, the Setup menu displays and changes may be made.

Personal Setup



This screen allows you to personalize certain options in PCAuthorize®. Items on this screen are optional and generally do not affect credit authorization.

Identification

There are four operator identification fields:

- Operator ID—Identification assigned by the bank or store manager. It may be used to identify you on certain authorization networks.

- Initials—To or three initials of the operator. This information is included in each transaction and is used as a reporting identifier in the Batch List screen and certain reports.

- Name—Operator's full name.

- Department—Operator's department code (maximum of 4 characters). This information is included in each transaction.

New Transaction Defaults

Select the card and transaction type defaults to be used for new transaction:

- **Card Type**—Select the card type (either Credit Card, T & E, Debit ATM, Check/MICR, Check/License, or Private Label) you wish to have automatically set when entering a new transaction.

- **Type**—Select the transaction type (either Sale & Deposit, Authorize Only, Return/Credit, or Void) you wish to have automatically set when entering a new transaction. This should normally be set for Sale & Deposit; however, if you are doing many returns, you may wish to change this to Return/Credit.

Preferences

You may select either or both of the following confirmation preferences:

- **Confirm Delete Batch**—Indicates a confirmation box is to display every time you delete a batch.

- **Confirm Delete or Void Transaction**—Indicates a confirmation box is to display every time you delete or void a transaction.

Note: Only nonapproved transactions may be deleted.

- **Open Batch List with only pending batches**—Indicates that you wish to show only pending batches when you first open the Batch List window.

- **Open Batch Detail with only pending transactions**—Indicates that you wish to show only pending transactions when you first open the Batch Detail List window.

- **Unattended operation**—Used only for kiosks, Internet gateways and other special situations where you wish fewer error or prompting dialogs.

Data Directory

This field tells PCAuthorize® where your transaction data files are located. It is usually a directory within the PCAuthorize® directory named Transact. If you wish to store your transactions in a different directory, use Windows to move them, and enter the path name to the directory.

PIN Pad Setup

Note: Not all versions of PCAuthorize® support PIN pads.

PIN pads are used only if you are processing ATM/Debit cards. They allow the customer to enter their PIN number for ATM/Debit cards.

If you have a PIN pad, select the model type and the serial port to which it is attached. To ensure your PIN pad is connected and working properly, select the **Test/Reset** button to run diagnostics. If diagnostics fail, check all your connections.

Note: Some PIN pads allow you to run diagnostics independently from PCAuthorize®. Refer to your PIN pad manufacturer's manual for additional information.

Not all installations of PCAuthorize® contain this screen. It is only used if you are dialing into alternate networks, such as American Express, or check guarantee services such as Equifax, Cardservice, Telecheck, etc.

Complete the Authorization and Settlement sections with the network telephone numbers, baud rates, and modem initialization fields.

Identifiers vary depending on the bank network you use. The information to be entered in these fields is provided by your authorizing bank. Also see your bank network plug-in documentation for additional information.

Multiple Merchant Setup

Note: Most users can skip this section unless they have a specific requirement.

General

PCAuthorize® can support multiple merchants or merchant information on one machine. We don't necessarily recommend you set up multiple merchants on a single machine, but if necessary, use the following setup guidelines.

***Note*: Your license agreement allows use of each copy of PCAuthorize® on one Windows machine at a time. This does *not* imply you can use one copy of PCAuthorize® on multiple machines for multiple merchants.**

You need only one copy of PCAuthorize® on your hard drive for all merchants.

PCAuthorize® stores all setup information in a setup file. This includes most of the information entered under the File/Setup menu. The setup file is named Setup.PAI.

If you create multiple setup files, all you have to do is open the setup file for the merchant for whom you wish to process transactions. (A bank network plug-in module may be used for all merchants on the same machine.)

Creating Multiple Setup Files

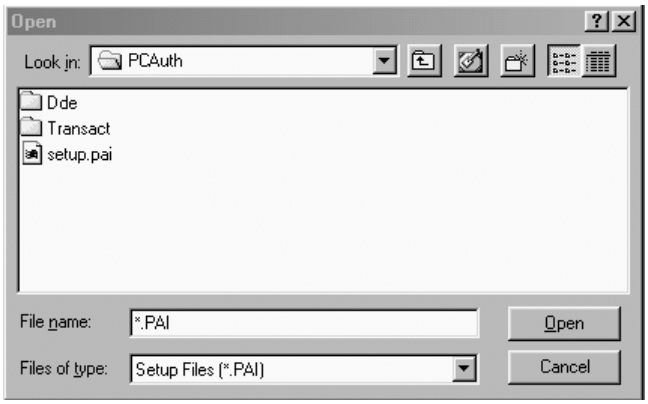
To create multiple setup files:

- Open PCAuthorize® and complete all setup items under the File/Setup menu for the first merchant. Refer to the setup information in this document and your bank network plug-in documentation for information.

- Authorize some transactions for the first merchant to ensure your Communications and Merchant information is correct.

- Be sure the current batch is settled or closed for your first merchant. Do this by selecting **Close Batch** from the File menu.

- Select **Switch Setup** from the File menu. A new screen will open. If you wish to create a new setup file, simply type a unique name followed by .PAI. Click the **Open** button.



- If you are creating a new setup file, PCAuthorize® prompts to ensure you wish to create one. Click **Yes** to create the new setup file.

- PCAuthorize® will now display the setup screens for the new merchant.

Note: In the Preferences fields on the Personal screen is a field called **Data Directory**. We recommend you change the name to something unique so that all transactions for a particular setup will be stored in a separate directory for each merchant. For example, change `C:Tellan\PCAuth\Transact` to `C:Tellan\PCAuth\MerchA`.

Repeat the above process for each merchant. The result will be a series of setup files, one for each merchant.

Using Multiple Setup Files

To use each merchant setup file, select **Switch Setup** from the File menu and then select the *.PAI file you wish.

Do not intermix transactions between/among merchants. Always be certain that you are entering and authorizing transactions for a merchant under the correct setup. Failure to do so will result in a serious accounting problem.

Multiple Bank Network Plug-in Setup

Note: Most users can skip this section unless they have a specific requirement.

PCAuthorize® can support multiple bank card networks on one machine. We don't necessarily recommend you set up multiple bank plug-in modules on a single machine, but if necessary, use the following setup guidelines.

***Note*: Your license agreement allows use of each copy of PCAuthorize® and a PCAuthorize® network plug-on module on one Windows machine at a time. This does *not* imply you can use one copy of PCAuthorize® on multiple machines for multiple merchants.**

Be sure all bank network plug-in modules are in the same directory as the PCAuthorize® application. You only need one copy of PCAuthorize® on your hard drive to use all bank networks.

In general, follow the procedures above under "Multiple Merchant Setup." For each merchant, choose the appropriate Agency Access on the Merchant Setup screen.

Section 3: Transactions

This section provides instructions on entering a transaction.

Before You Enter a Transaction

Review your bank network plug-in documentation and be sure you complete the required information discussed under "Setting Up PCAuthorize®" prior to entering a transaction. If this information is incomplete, your transactions may not be properly authorized by your merchant bank.

Make certain your PC clock is set to the current date and time. If not, you may be unable to accurately authorize transactions, resulting in chargebacks to your account.

Prior to entering a transaction you should have a batch open. You should start a daily routine of opening a new batch each business day, and settling it each evening. Batches can be thought of as a business day's worth of transactions.

For point-of-sale merchant stores, one batch is usually created each business day. Each transaction is authorized as it occurs, and the transaction is stored in the day's batch. Once a day is complete, the current batch is closed, balanced, settled, and deposited.

For mail-order businesses and other merchants, a transaction does not necessarily have to be authorized when it is entered. In this situation, transactions are simply stored as they are entered. Then, all transactions may be authorized at one time, saving time and money.

Some banks allow you to open several batches in a day, or occasionally continue a batch into another day's business. Check with your bank to ensure that you follow their business rules.

Additional information on batches may be found in Section 4.

To open a new batch, select **New Batch** from the File menu. Once the new batch is open, an empty Transaction List and a transaction screen will open. If you are not ready to enter transactions, close the transaction screen.

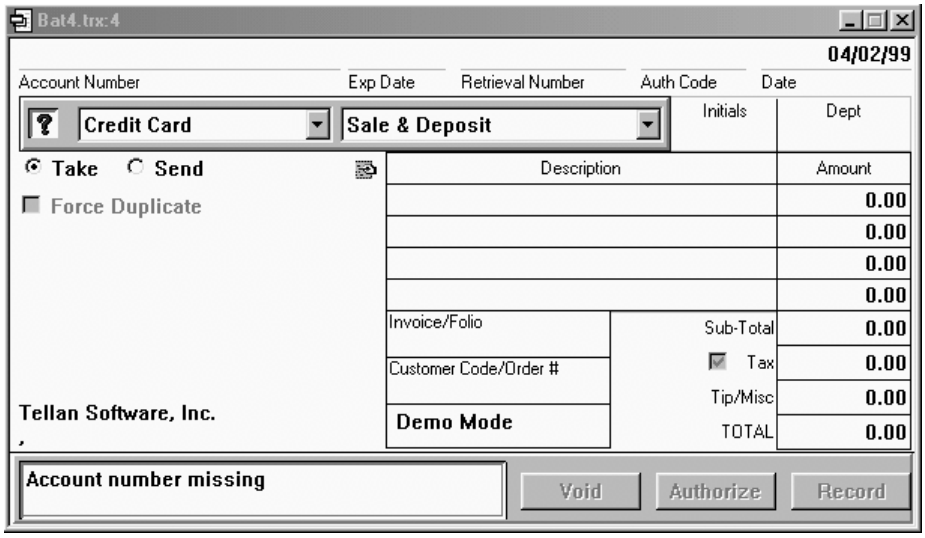
Note: The batch remains open regardless of the windows that are open, or even if you exit PCAuthorize®.

As you add transactions, the Transaction List will be updated with the new information.

If you do not have a batch open, PCAuthorize® will confirm you want one open and then open it automatically. You may only add transactions to a batch that has not been settled.

Opening the Transaction Window

To open the transaction screen, press the **Ctrl** and **N** keys simultaneously or click on the **New** icon on the Transaction List screen.



You may also start a new transaction automatically if you have a magnetic stripe reader by simply sliding the card through the reader. If PCAuthorize® detects a magnetic stripe read, it will automatically open a new transaction with the magnetic stripe data.

Transaction Window Navigation Techniques

PCAuthorize® uses standard Windows mouse and keyboard techniques to navigate the various windows and text fields. A brief description of important techniques follows.

Tab	Moves the cursor from one text field to the next.
Shift-Tab	Moves the cursor to the previous text field.
Ctrl-Space	Moves the cursor to the next Amount field.
Return	Adds or updates the transaction.
Enter	Adds or updates the transaction.
Left Arrow	Moves the cursor backward one character at a time until it reaches the beginning of the text field.
Right Arrow	Moves the cursor forward one character at a time until it reaches the end of the text field.

Entering a Transaction

After opening the transaction window do the following:

Card Type

Select the major card type using the Card Type popup menu. Items in this popup vary depending on your bank network and setup options. Generally, this need only be selected if you are doing Debit/ATM, private label cards or check guarantee. If the credit card is a major, nationally-recognized card, then PCAuthorize® can determine the card type based on the account number.

Transaction Type

Select the transaction type. Items in this menu vary depending on your bank network and setup options. All sale transactions should be Sale & Deposit. Auth Only (NO DEPOSIT) should be used only if instructed in your bank network plug-in documentation. You may also choose Return/Credit, Void, or Post Authorization. Exact use of these transactions is determined by your merchant bank.

- **Sale & Deposit**—used to authorize a sale and electronically capture the draft for deposit.

- **Auth Only (NO DEPOSIT)**—used to authorize a sale and not capture it for deposit. This will be your normal sales transaction if you do not use a draft capture service. If you are using a draft capture service, then this transaction type is used to preauthorize a transaction such as car-rental check-out, hotel check-in, etc. An authorization checks the validity of the cardholder's account, verifies that the card is not stolen, and verifies that the account has credit available at the time if the request.

- **Return/Credit**—used when merchandise is returned the next day or several days after the purchase. Void a transaction the same day of purchase rather than use a Return/Credit. Use of a Return/Credit transaction is determined by your merchant authorizing bank. A Return/Credit will appear in your Batch List as a negative amount, and the batch totals will be adjusted accordingly.

- **Void**—used only by certain merchant banks for voiding transactions on a day following the sale. For normal voids, use the Void button. See the discussion on "Voiding a Transaction."

- **Post Authorization**—used if you receive a voice authorization, or performed a prior Auth Only (NO DEPOSIT), and you wish to record the transaction without authorizing it again. This may occur when your merchant bank computer is down, you receive a referral response to an authorization, or other unusual circumstances.

> *Note*: A Post Authorization is sometimes called a Force or a Ticket Only transaction by some bank networks.

The Post Authorization records the transaction for electronic deposit without obtaining further authorization. It is used only if you are electronically depositing your drafts. Enter the authorization number you received from the bank. Some bank networks allow you to change a regular authorization that received a "Call" response to a Post Authorization. Consult your bank network plug-in documentation for more details.

Entry Items

The following are the entries for a transaction. Only three items—Account Number, Expiration Date and Amount—are required to obtain an authorization. Other items are optional, but some may help reduce your merchant charges.

> *Note*: Actual items displayed depend on the card type, transaction type, and other factors.

Account (required). Enter the account number on the card.

Exp date (required). Enter the expiration date on the card. This may be entered in the format *mmyy*, *mm/yy*, or *m/yy*.

Retrieval Number. This number is returned by some bank networks as an additional identifier for the transaction.

Auth Code. This number is returned by the bank network when the transaction is approved.

Date. The date of the transaction.

Initials (optional). This information is copied from the Personal setup screen. You may change it here for each transaction if you wish.

Department (optional). This information is copied from the Personal setup screen. You may change it here for each transaction if you wish.

Line Descriptions (required for receipt). You may enter up to 4 line items and amounts. The description is initially set to the default specified in the Receipts screen, may be changed for each transaction.

Amounts (required). Enter the amount(s) to be authorized. You may optionally include a dollar sign ($). Be sure to include a decimal point if the sale is not a whole dollar amount. Tax may be required for certain types of bank networks (e.g., American Express Purchase Card). The Total Amount is the amount to be authorized.

Invoice/Folio (required for mail order). Enter any identification you wish up to 12 characters.

Customer ID (optional). Enter any identification you wish up to 17 characters.

Micr (required if check guarantee). For check guarantee, enter the MICR number on the check. Your merchant bank will tell you wish number to enter.

Driver's license (required if check guarantee). For check guarantee, enter the driver's license number.

State code (required if check guarantee). Enter the two-character state code of the state issuing the license.

Birth date (optional). Enter the birth date on the driver's license. Enter the month, day, and year with or without slashes (mm/dd/yy or mmddyy).

Sale Type Items. Click on the icon for the type of sale you will be making—Take (for general retail, restaurant, etc.) or Send (for mail or phone order).

Sales Tax. Toggle the icon to automatically calculate sales tax. The sales tax rate is set in the Receipts screen.

Address Verification

If you use address verification, the following items will also be displayed (you must request Address Verification in the Addenda setup screen):

Address (optional). Enter the shipping address of the cardholder. Your merchant bank will tell you how to enter this.

Zip (optional). Enter the "ship to" Zip code of the cardholder.

Message Box

The box on the lower left of the screen is for messages. It displays errors and other information pertaining to the transaction prior to authorization. Once a transaction is authorized, it displays additional information resulting from the authorization.

Entry Mode

The Entry Mode indicates whether the transaction was keyed or entered via a magnetic stripe reader.

Force Duplicate

Some authorization networks reject duplicate transactions. This allows you to override the duplicate check. Refer to your bank network plug-in documentation for further information.

Credit Card Magnetic Stripe Authorization

To authorize a transaction using a magnetic stripe reader:

1. Swipe the card through the magnetic stripe reader. A transaction screen displays with the account number and date.

2. Enter the amount or amounts and line item descriptions, if desired. The Total Amount is the amount that will be authorized.

3. Click on **Authorize** or press the **Ctrl** and **A** keys simultaneously. A dialog box displays indicating the status of the connection to your merchant bank.

4. Once the transaction is authorized, the transaction screen displays the authorization response. The transaction is automatically recorded in your open batch.

Credit Card Manual Entry Authorization

To authorize a transaction by manually entering the information:

1. Select **New Transaction** from the Transactions menu or press the **Ctrl** and **N** keys simultaneously. A transaction screen displays.

2. Select **Sale & Deposit** or **Auth Only** from the Type menu.

3. Enter the account number, expiration date, the amount or amounts, and line item descriptions, if desired. The Total Amount is the amount that will be authorized.

   Note: The expiration date should be entered as four digits with no slashes.

4. Click on **Authorize** or press the **Ctrl** and **A** keys simultaneously. A dialog box displays indicating the status of the connection to your merchant bank.

5. Once the transaction is authorized, the transaction screen displays the authorization response. The transaction is automatically recorded in your open batch.

Check Guarantee MICR Authorization

Checks are generally guaranteed by using either the MICR number on the bottom of the check, or the driver's license number. Check with your bank to see which to use. To authorize a check guarantee transaction using the MICR number:

1. Select **New Transaction** from the Transactions menu or press the **Ctrl** and **N** keys simultaneously. A transaction screen displays.

2. Select **Check/MICR** from the Card Type menu and **Authorize Only** from the Transaction Type menu.

3. Enter the MICR number, the amount or amounts, and line item descriptions, if desired. The Total Amount is the amount that will be authorized.

4. Click on **Authorize** or press the **Ctrl** and **A** keys simultaneously. A dialog box displays indicating the status of the connection to your merchant bank.

5. Once the transaction is authorized, the transaction screen displays the authorization response. The transaction is automatically recorded in your open batch.

Check Guarantee License Authorization

Checks are generally guaranteed by using either the MICR number on the bottom of the check, or the driver's license number. Check with your bank to see which to use. To authorize a check guarantee transaction using the driver's license number:

1. Select **New Transaction** from the Transactions menu or press the **Ctrl** and **N** keys simultaneously. A transaction screen displays.

2. Select **Check/License** from the Card Type menu and **Authorize Only** from the Transaction Type menu.

3. Enter the driver's license number, the code for the state from which the license was issued, the birth date, the amount or amounts, and line item descriptions, if desired. The Total Amount is the amount that will be authorized. The birth date should be entered in the format *mmddyy*.

4. Click on **Authorize** or press the **Ctrl** and **A** keys simultaneously. A dialog box displays indicating the status of the connection to your merchant bank.

5. Once the transaction is authorized, the transaction screen displays the authorization response. The transaction is automatically recorded in your open batch.

Authorizing An Entire Batch

To authorize an entire batch:

1. Enter each transaction as discussed above. Rather than click on the **Authorize** button, press the **Enter** key or click the **Record** button. Each transaction will be recorded and the transaction screen cleared awaiting entry of the next transaction.

2. Once all transactions have been entered, close the transaction screen by selecting **Close** from the pull-down menu.

3. Click on the Transaction List screen to bring it to the front. The Transaction List screen is discussed in detail under "The Transaction List Screen Contents" following the discussion on "Discount Rates."

4. Click the **Auth** icon or select **Authorize Batch** from the Transactions menu. A dialog box displays indicating the status of the connection to your merchant bank.

5. As each transaction is authorized, it is highlighted in the Transaction List screen and the authorization response is indicated.

Discount Rates

To achieve the most favorable discount rates, follow these simple rules:

Retail Businesses

1. If you are a storefront and/or the customer is present, be sure to get a card swipe or manual imprint.

2. The cardholder must sign the charge slip or printed receipt.

3. The batch must be settled daily.

4. Save your paperwork for three years.

Mail-Order or Direct-Marketing Businesses

1. Always use Address Verification. This can be turned on under the Addenda setup.

2. Always enter an invoice number.

3. Ensure all transactions use “Send” rather than “Take.”

4. The batch must be settled daily.

5. Save your paperwork for three years.

Purchase Cards

To achieve the most favorable rates for purchase cards, do *all* of the following:

1. Be sure you enter Tax Amount if applicable.

2. Always enter an invoice number.

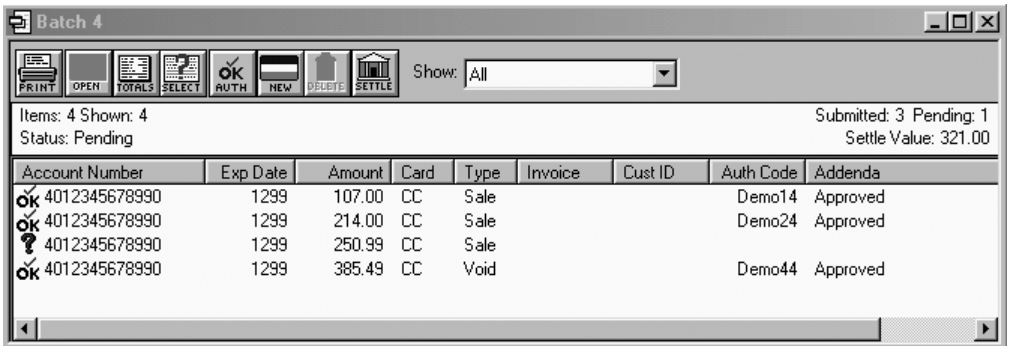
3. Always enter a Customer Code/Order #. Make sure these codes are strictly alphanumeric with no special characters.

4. Always enter Zip code information.

Corporate and Business Cards

There is no specific bin range for corporate or business cards; therefore, to achieve the most favorable rate for corporate or business cards, you must enter a Tax Amount.

The Transaction List Screen Contents



This screen lists the transactions in the currently-open batch. The top portion of the screen is a command bar. You may click on the command bar icons to perform various functions, or click on the titles and title icons to view the batch in various orders. The remainder of the screen lists transactions in the currently-open batch.

The Command Bar

The command bar contains a series of icons you may press to perform the associated function. A brief description of the icons and their functions follow.

Print—Prints a Batch Detail Report.

Open—Opens the selected transaction. A transaction detail screen displays.

Totals—Displays totals for the currently-open batch by major card type. The information in this screen is automatically updated whenever a change is made to the batch. See “The Totals Screen” for additional information.

Select—Allows you to select the transactions to display. See "Selecting Transactions" for additional information.

Auth—Authorizes all pending transactions in the batch. This is generally only available if your bank supports multiple transaction processing.

New—Starts a new transaction. Opens a transaction detail screen to allow transaction entry.

Delete—Deletes the selected transaction. A transaction can only be deleted if it has not yet been approved.

Settle—Settles the batch. See "Section 5: Settlement."

Transaction Titles

You may click on any transaction title to sort the list in that order. Resize each column by clicking and dragging on the dividing lines.

Transaction Line Items

The following displays for each transaction line:

- The icon indicates the status of the transaction:

  The transaction is pending and not yet submitted for authorization

  The transaction has been approved.

  The transaction has been declined.

You should call your merchant bank for an authorization or further instructions. If the transaction is approved over the telephone, change the transaction type to Post Authorization and enter the authorization number.

The transaction was in error. Generally, you should retry the transaction. If it fails a second time, call your bank's Help Desk.

The transaction is suspect. Hold the card if it is safe to do so and call your merchant bank.

The transaction has been settled by PCAuthorize®. For some bank networks the batch, not individual transactions, may be marked "settled."

- The Account Number is the primary account number from the credit card.
- The Exp Date is either the expiration date of the card or the birth date for check guarantee transactions.
- Amount is the total dollar amount of the transaction.
- Card is the type of card used in the transaction.
- Type indicates the transaction type (Sale, Auth, Return, Void, or Post).
- The next two columns are the Invoice number and Customer ID from the transaction.
- Auth Code is the authorization code is the transaction has been approved.
- Addenda field describes the status of the transaction (i.e., the status depicted by the icon in the first field).

Selecting a Transaction

There are two methods used to select transactions:

1. Use the **Show** pull-down menu from the command bar line to select either All, Pending Only, or Submitted Only transactions. This is a quick way to see which transactions have not been submitted for authorization.

2. Use the **Select** icon from the command bar line to limit the selection of transactions. When this icon is selected a window displays asking for further selection criteria. You may enter a partial account number, or check the boxes to limit the type of responses displayed (pending, accepted, hold-call, declined, referral, and error).

   Click the **Cancel** button to cancel any changes you make. Click the **Reset** button to reset the selection criteria to normal.

Note: Both Select and Show selection criteria are combined to determine which transactions are displayed.

Voiding a Transaction

The **Void** button is used when merchandise is returned the day of purchase. Use the Return/Credit transaction if merchandise is returned the following or subsequent days after purchase.

Procedures for voiding a transaction are determined by your merchant bank; however, the following general guidelines can be used.

1. Locate the transaction to be voided by selecting **Show Transactions** from the Transactions menu.

2. Scroll the Transaction List screen until you find the transaction you wish to void. Either double-click on the transaction line or click and select the **Open** icon on the command bar line.

3. A transaction screen will open. Click the **Void** button.

The transaction will be voided and display a special void icon.

Some banks require authorization of a void transaction, particularly if you are using electronic draft capture. If so, you must authorize the voided transaction by clicking on the **Authorize** button or icon.

Changing a Transaction

A transaction may be changed only if it has not been approved, and the batch not settled.

To change a transaction:

1. Select **Show Transactions** from the Transactions menu. The Transactions List screen displays. Scroll until you find the transaction you wish to change.

2. Double-click on the line showing the transaction you wish to change. The transaction entry window will open.

3. Make your changes. Click on the **Authorize** button to immediately connect to the bank and authorize the transaction, or click on the **Update** button to save the changes for later authorization.

Deleting a Transaction

A transaction may be deleted only if it has not been approved. To delete a transaction:

1. Ensure the batch containing the transaction is open.

2. Select **Show Transactions** from the Transactions menu. The Transactions List screen displays.

3. Scroll to the transaction you wish to delete and click on that line. This will highlight the line.

4. Click on the **Delete** icon.

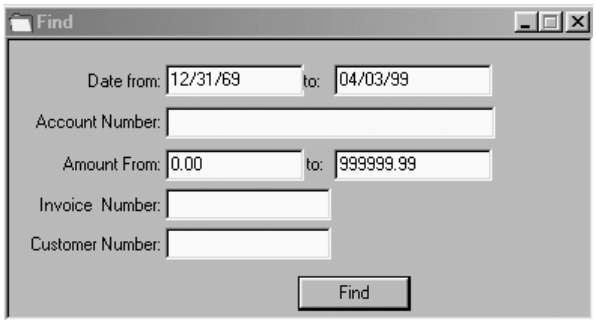
If the **Delete** icon is grayed, then you are not allowed to delete the transaction.

Finding a Transaction

PCAuthorize® includes a transaction search feature which allows you to search for a transaction by date range, card number, amount range, invoice number, and/or customer ID. To use the Find function:

1. Your current batch will be closed prior to the search. Once you have completed your search, you should reopen today's batch to resume transaction processing for the day.

2. Select **Find Transaction** from the File menu. A search dialog box displays.



3. Enter the information on which you wish to search. Information in the Account Number, Invoice and Customer Number fields will cause a match if any of the numbers match.

Note: Using "Date from" and "to" will cause the search to proceed more rapidly since only batches created or modified between the dates entered will be searched.

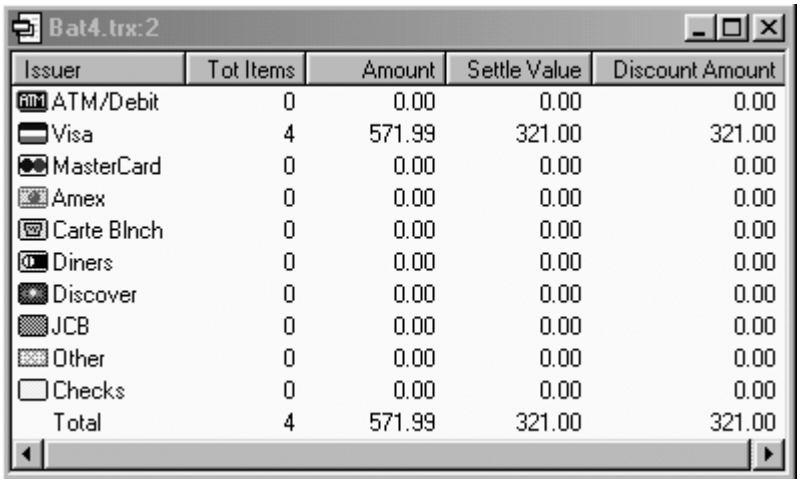
4. Click on the **Find** button to begin the search.

5. If a matching transaction is found, the transaction screen, along with the batch in which it exists, will be opened.

6. You may continue searching by clicking the **Find** button again. You may also change your search criteria and begin the search again.

Once you have completed your search, close the search window and reopen the batch you were working on prior to beginning the search.

The Totals Screen



Issuer	Tot Items	Amount	Settle Value	Discount Amount
ATM/Debit	0	0.00	0.00	0.00
Visa	4	571.99	321.00	321.00
MasterCard	0	0.00	0.00	0.00
Amex	0	0.00	0.00	0.00
Carte Blnch	0	0.00	0.00	0.00
Diners	0	0.00	0.00	0.00
Discover	0	0.00	0.00	0.00
JCB	0	0.00	0.00	0.00
Other	0	0.00	0.00	0.00
Checks	0	0.00	0.00	0.00
Total	4	571.99	321.00	321.00

This screen displays the totals by major card type of the currently-open batch. The Totals screen is automatically changed whenever a change is made to the batch.

The Totals screen may be open only if a batch is currently open. To open the window, either select **Totals** from the Transaction menu, or click on the **Totals** icon in the Transactions List screen.

Several types of totals are displayed in the Totals screen by major card type. Totals not included in major card type totals are indicated in the "Other" row.

Tot Items—Total number of items in the batch.

Amount—Net amount in the batch.

Settle Value—Net amount in the batch to be settled with the bank.

Discount Amount—Actual amount you will receive after discounts are applied. These amounts are calculated according to information supplied in the Card Types screen under the Setup menu.

Section 4: Batches

Handling Batches

PCAuthorize® keeps each batch in a separate file within the Transact directory. PCAuthorize® usually numbers each batch sequentially, starting with "1." If your merchant bank automatically captures your transactions, PCAuthorize® may use the batch number assigned by the host computer rather than its own batch number. In this case, PCAuthorize® will initially show pound signs (###) or question marks (???) for the batch number, and then show the batch number the host computer has assigned after the first transaction is authorized.

A batch may be open even though you may not have any windows open. In other words, if you close the Transaction List window, it does not close the batch. You must explicitly open and close each batch. PCAuthorize® keeps track of which batch is open even if you exit and reopen the application.

Only one batch may be open at a time, regardless of whether it is a new batch into which you are entering transactions, or an existing batch which you are reviewing. This restriction prevents you from entering transactions into the wrong batch, or causing a mix-up with the host computer if it is electronically capturing your transactions.

Handling Transactions within Batches

Some banks limit the number of transactions allowed per batch. There is a manageable limit, however, depending on your situation. We recommend you limit a batch to around 100 transactions, although bank networks generally allow up to 500 transactions and more in a particular batch. When batches reach this limit, balancing and finding transactions becomes cumbersome.

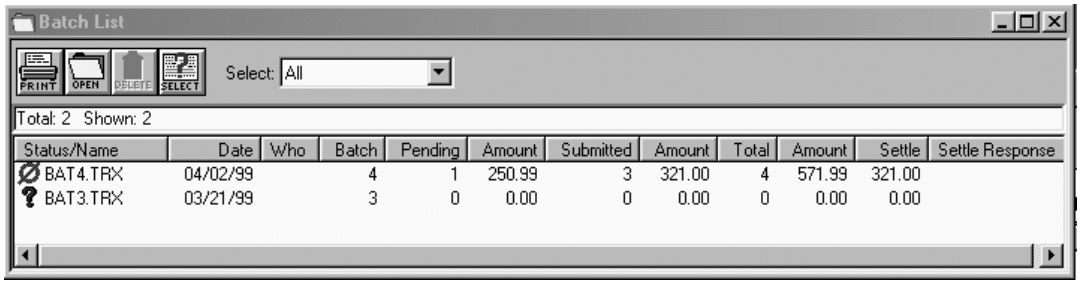
Each transaction in a batch is numbered sequentially, starting with "1." If your merchant bank electronically captures your transactions, PCAuthorize® may use the transaction number assigned by the host computer rather than its own number. In this case, PCAuthorize® will initially show question marks for the

transaction number, and then show the transaction number the host computer has assigned after the transaction is authorized.

> *Note*: Certain transactions may not be assigned an item number if not captured by the host; e.g., Authorize Only or check guarantee transactions.

Batch List Screen

The Batch List screen displays all batches currently in the Transact directory. To open the Batch List, select Show Batches from the Transactions menu. Once you have opened the Batch List, you may reopen a particular batch, print a list of all batches, delete a particular batch, or further select the items to be displayed.


Batch List
PRINT
OPEN
DELETE
SELECT
Select: All
Total: 2 Shown: 2
Status/Name Date Who Batch Pending Amount Submitted Amount Total Amount Settle Settle Response
BAT4.TRX 04/02/99 4 1 250.99 3 321.00 4 571.99 321.00
BAT3.TRX 03/21/99 3 0 0.00 0 0.00 0 0.00 0.00

The fields on this screen indicate the following:

- The icon indicates the status of the batch:

  ? The batch is pending. There are transactions in the batch that have not been authorized.

  The batch cannot be settled due to unauthorized transactions or errors.

  OK All transactions in the batch have been authorized. The batch may be settled if desired.

The batch has been settled by PCAuthorize®. Once a batch is settled it cannot be modified.

> *Note*: If your bank automatically settles your transactions, then the batch status will not be indicated as "settled."

- **Date**—The month, day and year the batch was created.
- **Who**—Initials of the individual who opened the batch. This information is taken from the Personal setup screen.
- **Batch**—The batch number.
- **Pending**—Item count and dollar amount of pending items in the batch; i.e., those items not yet submitted for authorization.
- **Submitted**—Item count and dollar amount of items in the batch submitted for authorization. This total includes both approved and nonapproved transactions.
- **Total**—Total item count and dollar amount of items in the batch.
- **Settle Value**—Actual value to be deposited in your bank account.

You may print the Batch List by clicking the **Print** icon. The Batch List contents will be printed in a format similar to what is shown on the screen. For additional information about printing and page setup, consult your Windows user's guide.

Opening an Existing Batch

To open an existing batch, select **Open Batch** from the File menu or **Show Batches** from the Transactions menu. The Batch List displays. Scroll to the batch you want to open and either click on the line and then select the **Open** icon, or simply double-click on the line. The Transaction List for the batch displays.

PCAuthorize® allows you to have one batch open at a time. If a batch is currently open, you must either close it prior to opening another batch or, when opening a batch, click **OK** in response to the prompt.

Generally, you should not authorize, modify, or add to prior day's batches. Check your bank network plug-in documentation for further procedures on modifying prior batches.

Deleting a Batch

To delete a batch, select Show Batches from the Transactions menu. The Batch List displays. Scroll to the batch you want to delete, and then click on the line, highlighting the batch. Once the batch is highlighted, click on the **Delete** icon. Once a batch is deleted in PCAuthorize®, it is immediately erased; there is no "undo" or retrieve function.

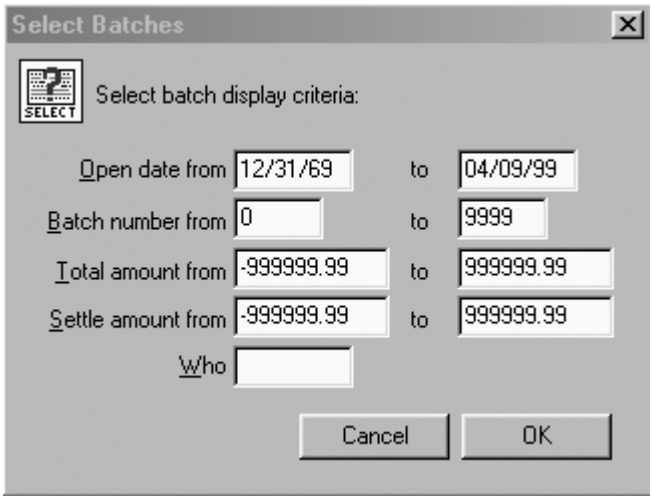
Delete a batch only if you are completely finished with it. It is a good idea to either copy it elsewhere (using the Finder), or export it into another format (using the PCAuthorize® export feature) prior to deleting it.

> *Note*: We recommend you keep batches for at least six months in case there are chargebacks to your account.

To delete a batch with Windows, exit PCAuthorize® if it is active. Follow the procedures you would when throwing any document in the Recycle Bin, as outlined in your Windows user's guide.

Selecting the Batch List Contents

A **Select** icon allows you to search for batches meeting specified selection criteria. If you click on the **Select** icon, the following screen displays:



You may search for a batch by date, batch number, total amount, settle amount, and the initials of the individual who originally opened the batch.

You may also use the **Select** pull-down menu to quickly limit the batches displayed. Select **All**, **Complete**, or **Pending** to limit the selection.

Authorizing a Batch

Transactions may be authorized at the time of entry or together in a batch if your bank supports this feature. You may choose to authorize transactions all at once only if your merchant bank is set up to do so. Generally, this feature is used by mail-order businesses who do not need to authorize each transaction individually or as a sale is made.

To authorize an entire batch:

1. If a batch is not open, either open the existing batch you wish to authorize, or start a new batch and enter the transactions. You may only add transactions to a batch that has not been settled. Rather than clicking the **Authorize** button for each transaction, simply press the **Record** button.

2. Open the Transaction List by selecting **Show Transactions** from the Transactions menu.

> *Note*: All pending transactions in a batch are authorized in the original entry order regardless of what is displayed in the Transaction List.

3. Click on the **Authorize** icon, or select **Authorize Batch** from the Transactions menu. Once you have clicked on this icon, a message displays indicating the status of the connection to your merchant bank. As each transaction is authorized, it will be highlighted and the authorization response will appear.

4. Once the batch is authorized, you may continue with other work.

Intermixing Batch and Single Authorizations

Most banks allow you to intermix authorization of a single transaction or the entire batch. When you authorize a batch, only the transactions that have not been authorized, or resulted in an authorization error, will be sent for authorization.

Refer to the documentation provided with your bank network plug-in software for additional information.

Section 5: Settlement

What is Settlement?

Settlement is balancing the books at the end of the day. You settle with your bank network, your merchant bank account, and all the people who charged on their card. It ensues that your credit card charges match what you have authorized, balances everything, and send it all off to your bank account.

Some bank networks settle for you, some insist you settle daily, and some give you the ability to settle when you want to. Check your bank network plug-in documentation for more information.

Most bank networks follow a business day and allow settlement only for the current business day's batch. To settle your batch, the batch must be the currently-open batch for the day. This is usually the batch you have been working on throughout the day.

Settlement Types

There are two ways in which settlement can be handled—host capture settlement and terminal capture settlement. PCAuthorize® uses the same settlement procedure for all bank networks, regardless of the type of settlement.

If your merchant bank is capturing the transactions for deposit, then settlement is used to ensure the batch maintained on the bank's computer matches the batch maintained by PCAuthorize®. This is done by comparing the totals for the two batches. If the totals match, then the batch is considered settled and will be deposited. If the totals do not match, then either the entire batch is retransmitted to the host, or you must balance it manually to match the host. Check with your merchant bank for additional information.

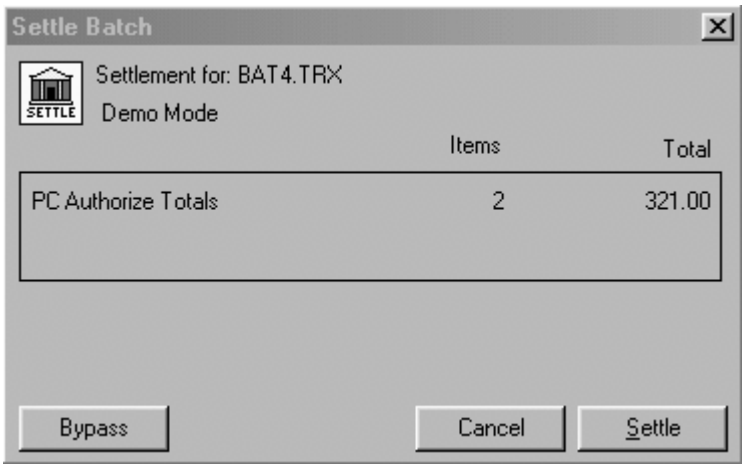
If you are using terminal capture, then settlement causes the entire batch to be sent to the bank's host. This may take some time depending on the number of transactions.

If you are using multiple authorizing agencies for settlement, PCAuthorize® must connect with each agency and settle the appropriate transactions for that agency; e.g., if you are using a major network for Visa and MasterCard transactions, but using American Express for their transactions.

Settlement Procedures

To settle your batch, the batch must be the currently-open batch for the day. Once the batch is opened:

1. Either select **Settle Batch** from the Transactions menu or click the **Settle** icon on the Transaction List screen.



2. A window displays showing the totals PCAuthorize® has computed for the batch. Host totals may or may not be shown, depending on the bank network you use. If they are shown, they should match the PCAuthorize® totals. Click the **Settle** button.

3. PCAuthorize® will then connect with the bank and settle the batch. Depending on the type of settlement and number of transactions, this may take some time.

4. After PCAuthorize® has completed the settlement, a window displays with the batch totals and indicates whether the settlement was completed. Assuming it completed successfully, click the **OK** button.

Note: Once a batch is completely settled it cannot be modified.

Settlement for multiple authorizing agencies is handled in the same manner as standard settlement; however, you will be prompted for each agency as settlement begins. You may temporarily bypass settlement for a particular agency by pressing the **Bypass** button.

A batch will be marked "settled" only if all agencies and transactions have successfully settled.

Interactive Balance

Some bank networks provide additional aids for balancing and settling your transactions. If your bank network and bank network plug-in support this, an additional item—**Interactive Balance**—appears at the bottom of the Transactions menu.

The content and use of Interactive Balance varies among networks. Consult your bank network plug-in documentation for details. You should, however, observe the following guidelines.

You may open the Interactive Balance window at any time by selecting **Interactive Balance** from the Transactions menu. A screen similar to the following displays:

To perform an interactive balance transaction, first select the transaction type from the Type pull-down menu. Complete any additional data in the fields according to your bank network plug-in documentation. Click the **Connect** button.

Once the transaction has been transmitted to your bank, a response will be returned and displayed on the screen. Consult your bank network plug-in documentation for the meaning of these responses.

Section 6: Reports and Troubleshooting

Reports

PCAuthorize® allows you to print the following reports:

- **Transaction Sale Invoice**—Detail of an individual transaction, printed on either a standard Windows printer or special receipt printer. You will usually be printing a transaction immediately after entering and authorizing it. To effect automatic receipt printing, check the Automatically Print Receipt field on the Receipts setup screen. If you are printing a receipt at a later time, you must first open the transaction screen by selecting **Show Transactions** from the Transactions menu. Highlight the transaction for which you wish an invoice printed and press the **Print** icon.

- **Bank Audit List**—Detail listing of each transaction. This report is used to research chargebacks and other situations. To print this report, select the **Print** icon from the open batch. Select **Bank Audit List** from the Report Type pull-down menu. Card type totals may be included if this field is checked.

- **Merchant Summary**—Detail listing of each transaction, including merchant information such as invoice number, customer number, etc. To print this report, select the **Print** icon from the open batch. Select **Merchant Summary** from the Report Type pull-down menu. Card type totals may be included if this field is checked.

- **Merchant Detail**—Detail listing of each transaction, each description line, etc. To print this report, select the **Print** icon from the open batch. Select **Merchant Detail** from the Report Type pull-down menu. Card type totals may be included if this field is checked.

- **Batch Detail List**—To print a Batch Detail List, select **Show Transactions** from the Transactions menu to open the Transaction List screen. Sort the batch in the order in which you wish to have the report printed by clicking on the titles. You may also limit the items printed by clicking the **Select**

button or using the **Show** pull-down menu. Select **Print** from the File menu or click on the **Print** icon.

- **Batch Summary List**—To print a Batch Summary List, select **Show Batches** from the Transactions menu to open the Batch List screen. Sort the batches in the order in which you wish to have the report printed by clicking on the titles. You may also limit the items printed by clicking the **Select** button or using the **Select** pull-down menu. Select **Print** from the File menu or click on the **Print** icon.

Troubleshooting

This section discusses what to do when:

You get a "Host is not responding" message

If this is your first authorization, then your modem is not configured properly for the bank network. You must enter the appropriate modem initialization string in the Communications setup screen. Refer to your bank network plug-in documentation.

If you have been using PCAuthorize® for some time, call your bank's Help Desk to see if their network is down.

You do not get a response from the bank network

Try the authorization again. If it fails several times, call your bank's Help Desk to see if their network is down.

Merchandise is returned

If the merchandise is returned the same day it was sold, find that transaction and void it. If it was returned on another day, enter the new transaction as a Return/Credit.

You get a call response

Call your bank's Authorization Center for authorization. If the transaction is approved over the telephone, change the transaction type to Post Authorization and enter the authorization number. See the discussion on Post Authorization under "Transaction Type" for additional information.

You receive a voice authorization over the telephone

Start a new transaction or, with the current transaction, change the transaction type to Post Authorization. Enter the authorization number. See the discussion on Post Authorization under "Transaction Type" for additional information.

You receive the message "Settlement Incomplete"

If PCAuthorize® totals do not match the host settlement totals, you must balance your batch. This generally occurs when there are communication problems and a transaction was not captured properly.

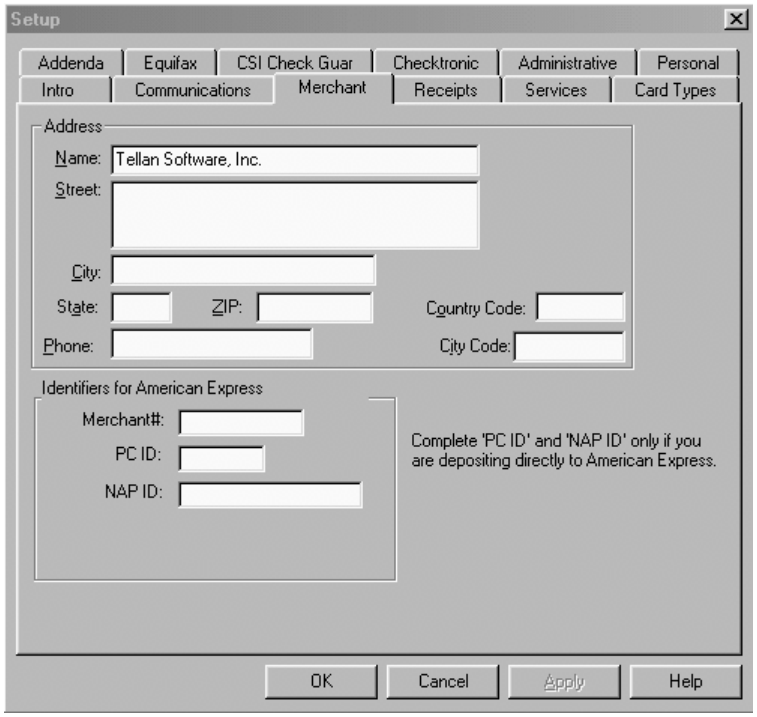
Check the batch for duplicate or missing transactions and adjust accordingly.

Section 7: Network-Specific Instructions

This section provides specific instructions for each bank network. Be sure to read the section for the network you are using. Any additional instructions from the bank take precedence over these instructions. The network name is the one selected in the Agency Access field Communications setup screen.

American Express

Merchant Setup



Most fields in the Merchant setup screen are required.

- Complete the Merchant Name and Address section according to American Express guidelines. Your merchant name, city and state are transmitted upon electronic draft settlement. Ensure that this information is correct.

- Country Code and City Code are not required.

- All items in the Identifiers section must be completed. Obtain the appropriate information from the fax/letter sent to you by American Express, or call 1-800-352-9814.

Addenda Setup

This plug-in module does not support Address Verification.

Receipts Setup

American Express has certain guidelines relating to item descriptions. At least one charge description is required. The other three descriptions should be blank if not used. Descriptors should be as concise as possible. A generic "Merchandise" description is not acceptable. Use, for example, something like the following:

OFFICE SUPPLIES/PENCILS/PAPER

American Express Test Procedures

Once you have completed all of the setup items under the Setup menu, and before you accept American Express transactions, you must run a test settlement with American Express.

1. Complete the setup items under the Setup menu. The Communications and Merchant setups must be completed.

2. Select **Communications** from the Setup menu. The Communications setup screen displays. Select **Amex Test Settle** in the Agency Access field. Click **OK**.

3. A second screen displays. Complete all the settlement information fields. For the settlement telephone number, type in 703-761-3744. Click **OK**.

4. Select **Show Batches** from the Transactions menu. A list of batches displays.

5. Double-click on the first batch (batch number 1). A Transaction List opens. This is a preset test batch.

6. Click the **Settle** icon on the Transaction List screen. A Settle Batch screen will open.

7. Click **OK**. PCAuthorize® will dial the American Express network and perform the test settlement.

8. Once you have completed the test, select **Communications** from the Setup menu. The Communications setup screen will open. Select **American Express** in the Agency Access field. Click **OK**. Select **Close Batch** from the File menu.

Authorization

American Express has special guidelines relating to certain items on the transaction screen.

- A "ship to" Zip code is required for telephone or mail-order transactions. This will appear in a special box in the transaction screen. You will not receive a response code when verifying the address, but it will be registered in Amex's system.

- The Customer ID is optional and is placed in the Customer ID field.

- An Invoice/Folio Number is required and is limited to nine characters.

- Sales Tax should be completed, if applicable.

- At least one charge description is required. The other three descriptions should be left blank if not used. Descriptors should be as concise as possible.

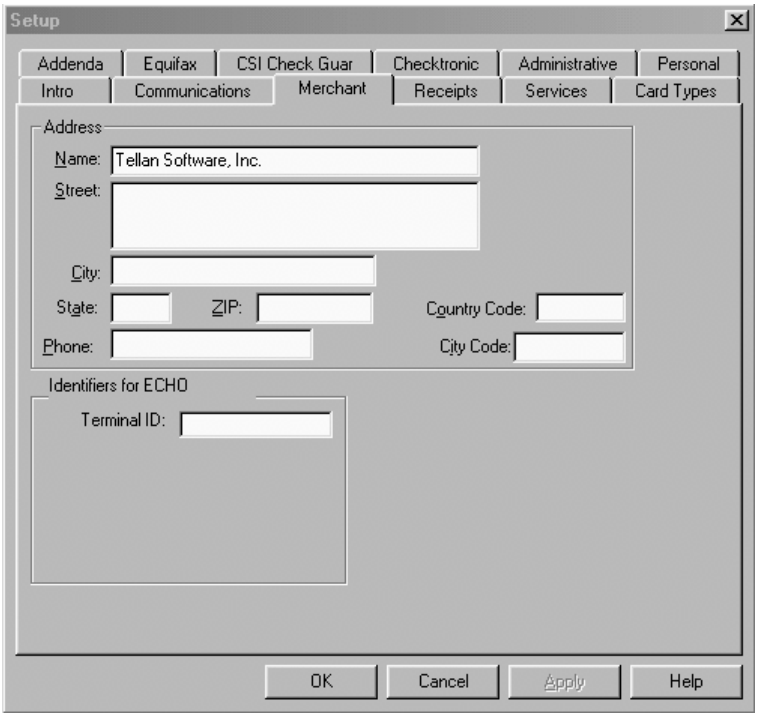
Return/Credits, Post Authorizations, and voided items are *not* authorized; when you enter these transactions, simply click the **Record** button. If you void a transaction, the window will be closed and the transaction flagged as "voided."

Settlement

You *must* settle each batch. We recommend that you settle each day's transactions at the end of the day. If this is not done on a timely basis, your discount rate may be higher. The settlement function transmits all transactions to the American Express host. Depending on the number of transactions, this may take some time.

ECHO Network

Merchant Setup



- Complete the Merchant Name and Address section according to bank guidelines. Country Code and City Code are not required.

- The ECHO terminal identifier is 11 characters in length. Obtain the terminal identifier from your bank account representative.

Voids

Voids *must* be authorized. Be sure to click the **Authorize** button after voiding a transaction.

Settlement

There is no settlement procedure for ECHO. ECHO settles all transactions automatically at midnight Pacific time. You should open a new batch each business day. You may check your total captured amounts for the day using the Interactive Balance feature described below.

Interactive Balance

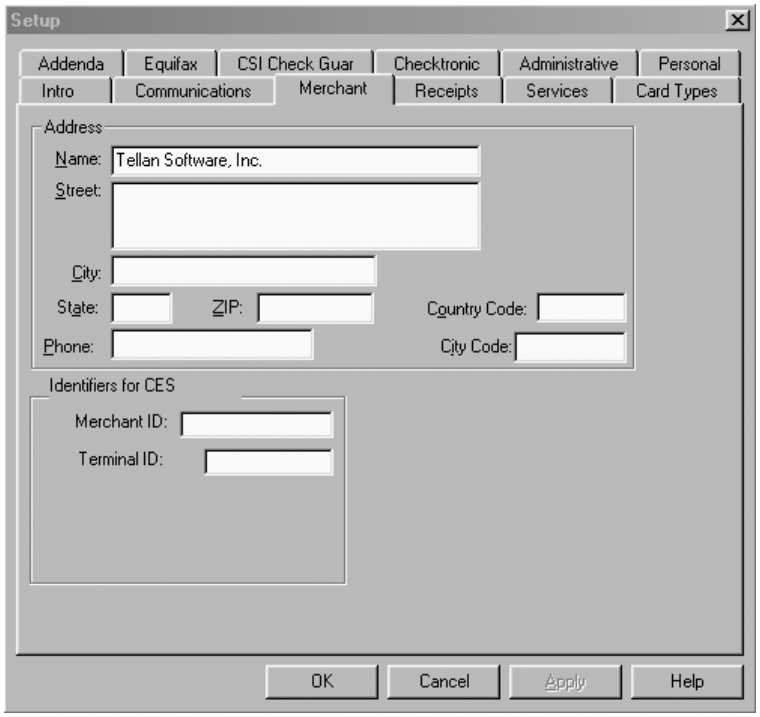
The ECHO plug-in module provides for an additional feature called Interactive Balance. This feature allows you to run a modem test and review the last three day's totals stored in the network host.

Choose **Interactive Balance** from the Transactions menu to open the Interactive Balance screen.

Address Verification

For Sale & Deposit transactions, PCAuthorize® automatically transmits two transactions to ECHO—an Authorize-Only transaction to check the credit limit and, if the transaction is approved, a Post Authorization to deposit the funds.

Merchant Setup



Most fields on the Merchant screen are required.

- Complete the Merchant Name and Address section according to bank guidelines.
- The Country Code and City Code are not required.
- In the Merchant ID field, enter the CES 12-digit merchant number.
- In the Terminal ID field, enter the CES six-digit terminal number.

Authorization

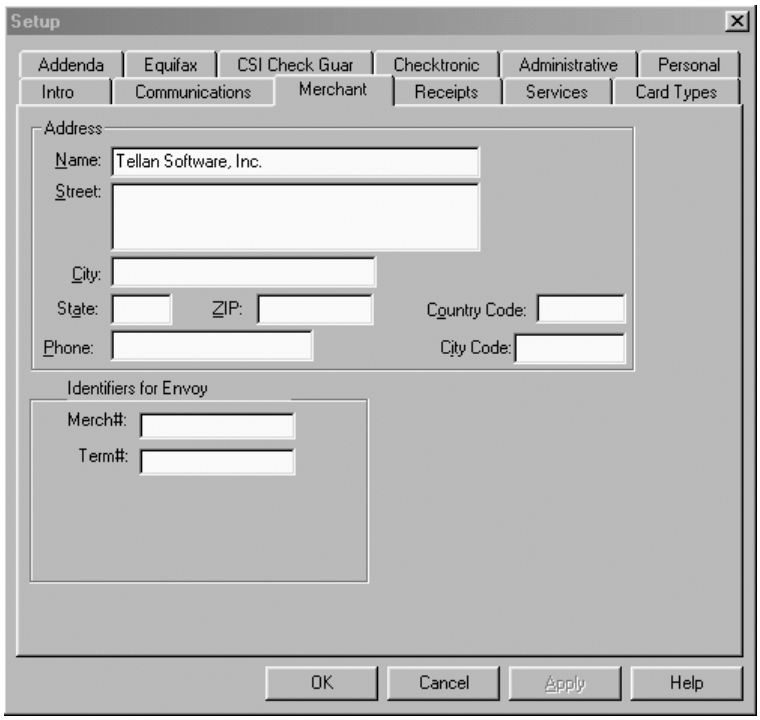
Return/Credits, Post Authorizations and voided items are not individually authorized; when you enter these transactions, simply click the **Record** button. If you void a transaction, the screen will be closed and the transaction flagged as “voided.”

Settlement

You *must* settle each batch. We recommend that you settle each day’s transactions at the end of the day. If this is not done on a timely basis, your discount rate may be higher. The settlement function transmits all transactions to the merchant bank host. Depending on the number of transactions, this may take some time.

FDMS Nashville – Envoy

Merchant Setup



Most fields in the Merchant screen are required.

- Complete the Merchant Name and Address section according to bank guidelines.
- The Country Code and City Code are not required.
- In the Merchant ID field, enter the Envoy merchant number.
- In the Terminal ID field, enter the Envoy terminal number.

Authorization

Return/Credits, Post Authorizations and voided items are not individually authorized; when you enter these transactions, simply click the **Record** button. If you void a transaction, the screen will be closed and the transaction flagged as "voided."

Settlement

You *must* settle each batch. We recommend that you settle each day's transactions at the end of the day. If this is not done on a timely basis, your discount rate may be higher. The settlement function transmits all transactions to the merchant bank host. Depending on the number of transactions, this may take some time.

Address Verification

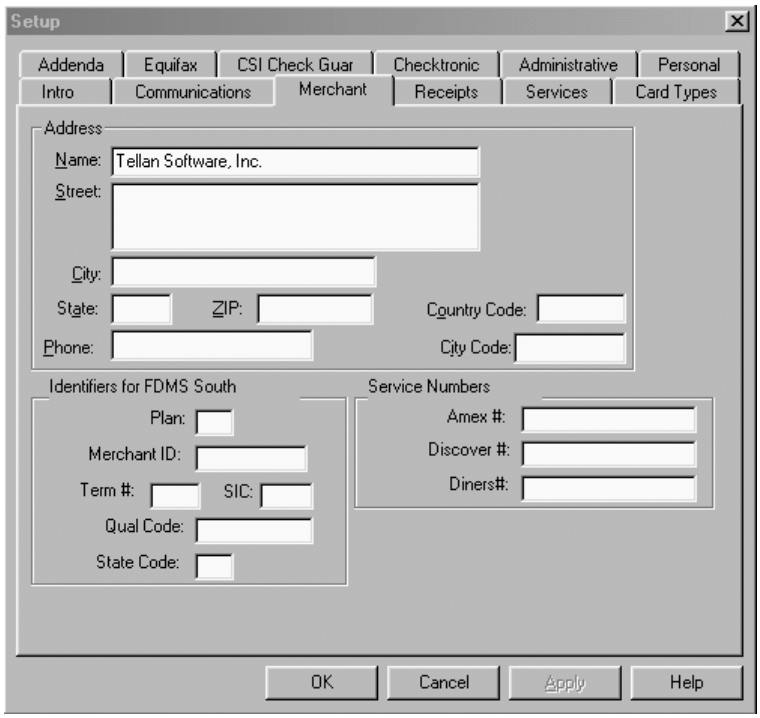
The possible AVS response codes are:

- First character is address match:
  - Y Match
  - N No match
  - X Service not available

- Second character is Zip match:
  - Y Match
  - N No match
  - X Service not available

FDMS South – NaBanco

Merchant Setup



Most fields in the Merchant screen are required.

- Complete the Merchant Name and Address section according to bank guidelines.
- The City Code is the first five digits of your Zip code.
- The Country Code is 840 for the United States.
- In the Merchant ID field, enter the NaBanco nine-digit merchant number.

- In the Serial Number field, enter the terminal number provided by NaBanco.

- In the Qual Code field, enter the five-digit NaBanco qualification code (e.g., 25800).

- In the Service Numbers fields, enter the Service Numbers if you accept the card type. For American Express, enter your ten-digit American Express number; for Discover, enter the low-order ten digits of the SE # assigned by Discover.

- In the State Code field, enter the two-digit state code.

- In the SIC Code field, enter the four-digit Standard Industry Classification code. These codes are a subset of the Merchant Classification Code Guide published by the American Banking Association. Mail or telephone-order businesses must use SIC codes from 5960 to 5969.

Addenda Setup

Address Verification is not supported by this plug-in module.

Authorization

Return/Credits, Post Authorizations and voided items are not individually authorized; when you enter these transactions, simply click the **Record** button. If you void a transaction, the screen will be closed and the transaction flagged as "voided."

Settlement

You *must* settle each batch. We recommend that you settle each day's transactions at the end of the day. If this is not done on a timely basis, your discount rate may be higher. The settlement function transmits all transactions to the merchant bank host. Depending on the number of transactions, this may take some time.

Mail Order

NaBanco has special requirements for mail or telephone-order businesses. The PCAuthorize® NaBanco plug-in module uses the Merchant Classification Code to determine if transactions should be indicated as mail-order. All mail-order transactions are also processed as nonmagnetic stripe, even though a stripe reader may have been used.

Mail or telephone-order businesses must us a SIC code from 5960 to 5969.

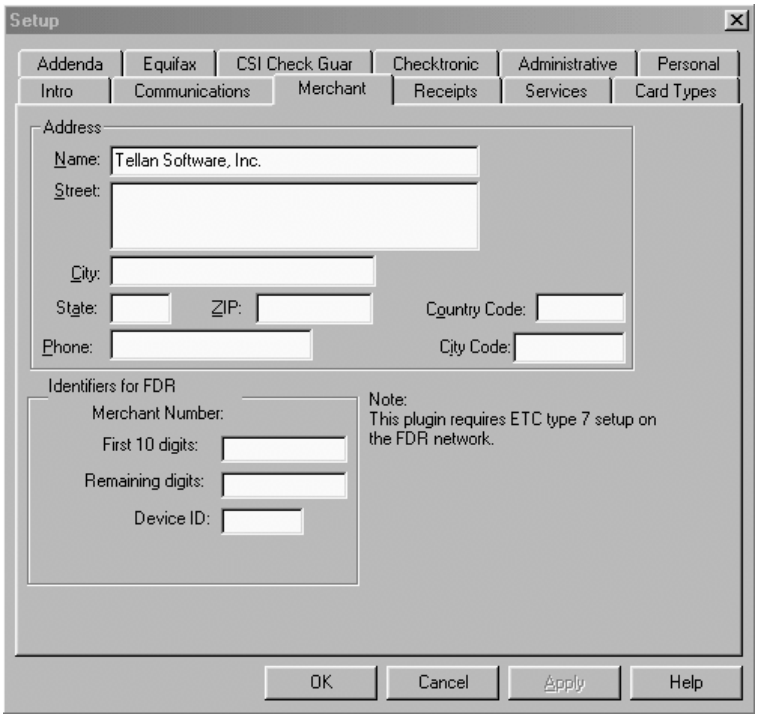
State Codes

Alabama	01	Illinois	17	Montana	30	Rhode Island	44
Alaska	02	Indiana	18	Nebraska	31	South Carolina	45
Arizona	04	Iowa	19	Nevada	32	South Dakota	46
Arkansas	05	Kansas	02	New Hampshire	33	Tennessee	47
California	06	Kentucky	21	New Jersey	34	Texas	48
Colorado	08	Louisiana	22	New Mexico	35	Utah	49
Connecticut	09	Maine	23	New York	36	Vermont	50
Delaware	10	Maryland	24	North Carolina	37	Virginia	51
Dist. of Columbia	11	Massachusetts	25	North Dakota	38	Washington	53
Florida	12	Michigan	26	Ohio	39	West Virginia	54
Georgia	13	Minnesota	27	Oklahoma	40	Wisconsin	55
Hawaii	15	Mississippi	28	Oregon	41	Wyoming	56
Idaho	16	Missouri	29	Pennsylvania	42		

FDMS – Omaha ETC Plus

Note: You must be set up on the FDR Network as ETC Type 7 to use this plug-in module.

Merchant Setup



Most fields in the Merchant screen are required.

- Complete the Merchant Name and Address section according to bank guidelines.
- The Country Code and City Code are not required.
- The FDR merchant account number is a maximum of 19 digits in length. Obtain the merchant account number from your bank account

representative. Under the Identifiers Merchant Number section, enter the first ten digits; enter the remaining digits in the appropriate fields.

- The FDR device ID is four characters. It allows you to identify multiple terminals or devices under the same merchant number. Generally, enter a “0001” for your first workstation, “0002” for your second, etc.

Personal Setup

The Operator ID is transmitted to the FDR network, if entered. Complete the other items if desired.

Authorization

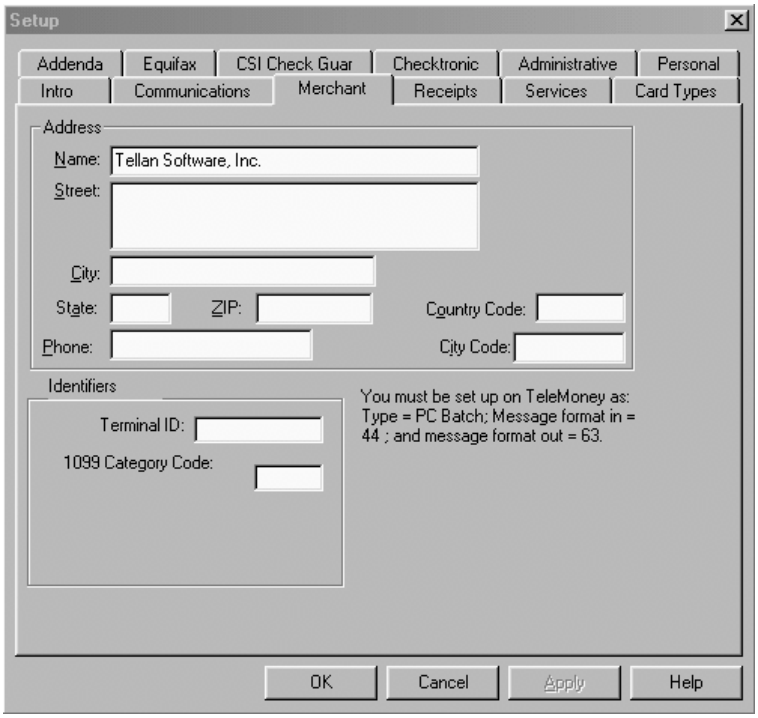
Return/Credits, Post Authorizations and voided items are not individually authorized; when you enter these transactions, simply click the **Record** button. If you void a transaction, the screen will be closed and the transaction flagged as “voided.” All Return/Credits, Post Authorizations, and voided items are sent to the host upon settlement.

Settlement

You *must* settle each batch. We recommend that you settle each day’s transactions at the end of the day. If this is not done on a timely basis, your discount rate may be higher. The settlement function transmits all transactions to the merchant bank host. Depending on the number of transactions, this may take some time.

FDMS – TeleMoney

Merchant Setup



- Complete the Merchant Name and Address section according to bank guidelines.

- The Country Code and City Code are not required.

- Under the Identifiers section, enter the five-digit Site Number in the Terminal ID field. Obtain the Site Number from your bank or TeleMoney account representative.

Authorization

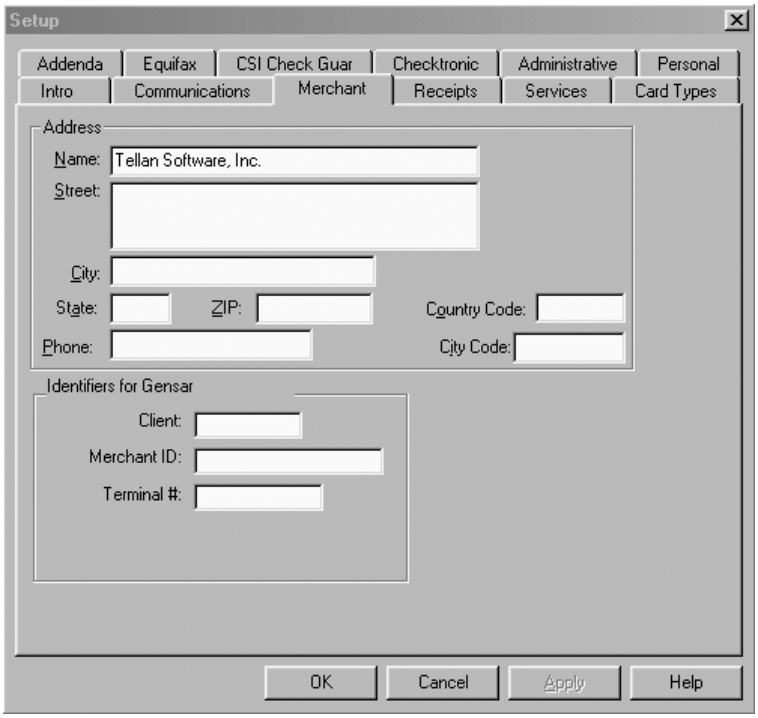
When a new batch is opened, it is not assigned a batch number and appears as "???" until the first transaction is authorized. Once you authorize the first transaction, the batch number is assigned from the host.

Settlement

Settlement is supported but is optional, depending on your requirements. Check with your bank or Telemoney representative for more information. If you use the TeleMoney "auto close" and "auto release" features, then you are not required to settle. We recommend, however, that you settle each day's transactions at the end of the day.

Paymentec – Gensar

Merchant Setup



- Complete the Merchant Name and Address section according to bank guidelines.
- The Country Code and City Code are not required.
- In the Client field, enter the four-digit Gensar client number.
- In the Merchant ID field, enter the 12-digit Gensar merchant number.
- In the Terminal # field, enter the three-digit Gensar terminal number.

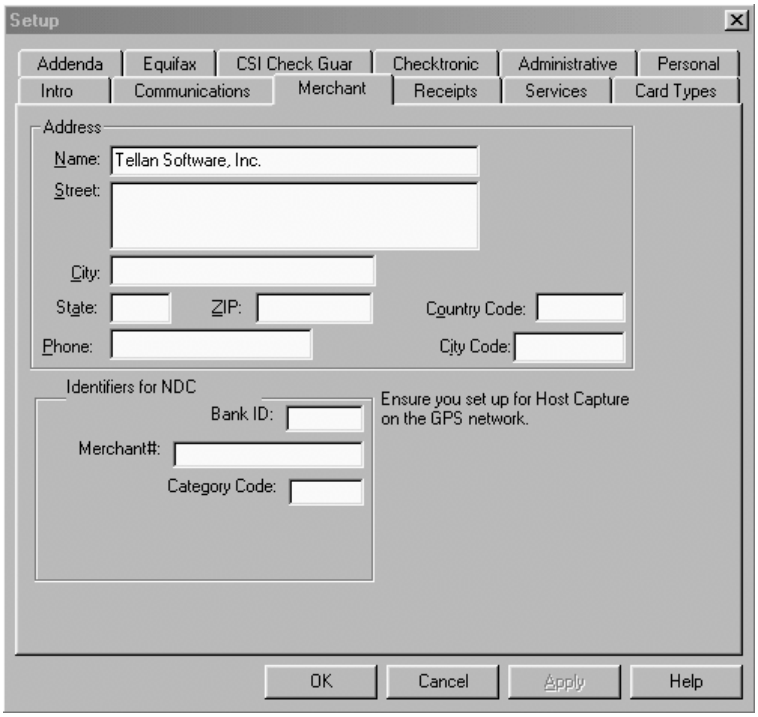
Settlement

You *must* settle each batch. We recommend that you settle each day's transactions at the end of the day. If this is not done on a timely basis, your discount rate may be higher. The settlement function transmits all transactions to the merchant bank host. Depending on the number of transactions, this may take some time.

Global Payment – NDC (Host Capture)

Note: The NDC Draft capture plug-in module uses the NDC Host-based Draft Capture feature.

Merchant Setup



- Complete the Merchant Name and Address section according to bank guidelines.

- The Country Code and City Code are not required.

- Obtain the following identifiers from your bank account representative:

- The NDC Bank ID (six digits in length)
- The Merchant Number (from 1 to 15 digits in length)
- The Category Code (required only if you are a mail or telephone-order business. Mail or telephone-order business must use an SIC code from 5960 to 5969)

Addenda Setup

This plug-in module supports Address Verification. Check the Address Verification box if you plan to use it.

Batch and Item Numbers

When a new batch is opened it is not assigned a batch number and appears as "???" until the first transaction is authorized and captured. Once you authorize the first transaction, the batch number is assigned from the host.

This plug-in module stores the running dollar total from the NDC host in the Host Settlement totals. This total may be viewed in the Transaction List screen.

When a new transaction is opened, it is not assigned an item number and appears as "---" until the first transaction is authorized and captured. Once you authorize the first transaction, the batch number is assigned from the host.

Authorize-Only Transactions

This feature is not currently supported.

Void

Voids must be authorized. Be sure you click the **Authorize** button after voiding a transaction. If a void is not authorized, the batch will not balance with the host totals, and you will not be able to settle.

Duplicate Transaction

NDC uses a safeguard to prevent duplicate transactions from being captured in case of time-outs, premature line disconnects, and other failures. When this occurs, NDC captures the transaction even though it may not be returned to PCAuthorize®.

If a "Duplicate Transaction" response is returned from a previous time-out, the transaction has already been captured. NDC scans the previous 25 transactions to check for duplicates. When this occurs, PCAuthorize® does the following:

- PCAuthorize® attempts to determine whether this is a real duplicate. It does this by scanning all transactions in the batch for a matching authorization number. If a matching reference number is found, then it is an indication that the transaction is a valid duplicate.

- Conversely, if a matching reference number is not found, it can be assumed a prior failure occurred, and the authorization and reference number should be used for the transaction.

- Regardless of the search outcome, PCAuthorize® adds a Force Duplicate Transaction checkbox to the Transaction screen. If this transaction is a true duplicate, check the box and click the **Authorize** button. PCAuthorize® will force the transaction to be authorized and captured.

- If the duplicate transaction is the result of a prior failure, then simply record the authorization number and close the Transaction screen.

Settlement

Depending on your NDC host setup. You should settle each batch at the end of your business day. The settlement function compares the host totals with the PCAuthorize® totals. If the totals match, the batch is closed and marked as "settled."

Once a batch is settled, NDC returns a batch settlement control number. The settlement control number is displayed in the Transaction List screen. You

should make a note of this number, as it may be required for future reference by the bank.

If you cannot settle due to an out-of-balance situation, use the Interactive Balance function described below.

Interactive Balance

The NDC plug-in module provides an Interactive Balance feature. You should only use this feature if you cannot settle your batch due to an out-of-balance situation.

The Interactive Balance feature is accessed from the Transactions menu. It provides the following functions and information:

- Host Totals Review—Retrieves information about the total dollar amount in the batch as stored on the NDC network host. The response message indicates the batch number, number of items, and dollar value.

- Force Balance—This function forces a balance to be deposited even if it is out of balance. If you cannot identify the problem when a batch is out of balance you may use the Force Balance function to override the out-of-balance condition. When the NDC host receives a Force Balance request, it closes the batch and settles it regardless of the situation.

- Clear Host—Under very rare circumstances it may be necessary to clear the transactions in the currently-open batch at the NDC host. When you use the Clear Host request, the NDC host deletes the detail records for the transactions in the currently-open batch. You must then use the Post Authorization transaction to reenter the transactions from paper backup before attempting to settle the batch. Do not use this transaction unless specifically instructed to do so by NDC or Tellan.

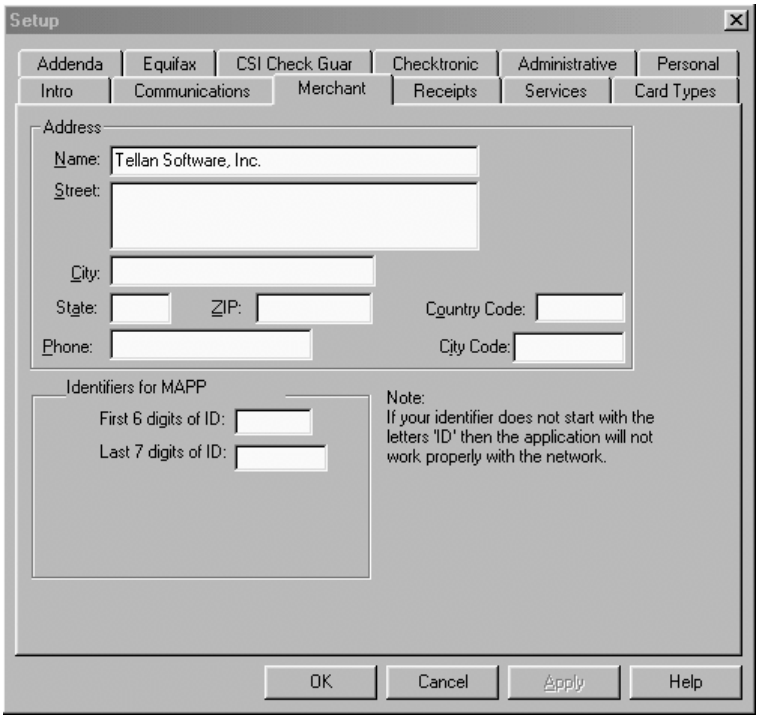
Global Payment – MAPP

MAPP Host Setup Requirements

The following items are required for setup on the MAPP host:

- Host Draft Capture – Automatic batch open
- Multitran
- Address Verification (AVS), if used
- 20-character window display

Merchant Setup



- Complete the Merchant Name and Address section.

- The Country Code and City Code are not required.

- The MAPP terminal identifier is 13 characters. Obtain the terminal identifier from your bank account representative. Enter the first six characters of the terminal identifier and the remaining seven characters of the terminal identifier in the appropriate fields. The terminal identifier is split this way for historical reasons.

> *Note*: MAPP has assigned the first two characters of the terminal identifier as "ID" for PCAuthorize®. If your identifier starts with something different, PCAuthorize® may not work properly.

Batch and Item Numbers

When a new batch is opened it is not assigned a batch number and appears as "???" until the first transaction is authorized and captured. Once you authorize the first transaction, the batch number is assigned from the host.

This plug-in module stores the running dollar total from the MAPP host in the Host Settlement totals. You may click on the **Settle** button to see the total and ensure you are in agreement. After clicking on the **Settle** button, be sure to click **Cancel** in the Settle screen unless you really want to settle the batch. The host total items are not retained.

The transaction item number is assigned from the last three digits of the returned reference number. This number starts at "1" at the beginning of the day and is incremented for each transaction during the day.

Authorize-Only Transactions

Once an Authorize-Only transaction is authorized, MAPP allows it to be changed to a Post Authorization and captured if it is Visa magnetic-stripe read and qualifies for the PS2000 discount rates.

Void

Voids must be authorized. Be sure you click the **Authorize** button after voiding a transaction. If a void is not authorized, the batch will not balance with the host totals, and you will not be able to settle.

Duplicate Transaction

MAPP uses a safeguard to prevent duplicate transactions from being captured in case of time-outs, premature line disconnects, and other failures. When this occurs, MAPP captures the transaction even though it may not be returned to PCAuthorize®.

If a "Duplicate Transaction" response is returned from a previous time-out, the transaction has already been captured. MAPP scans the previous 25 transactions to check for duplicates. When this occurs, PCAuthorize® does the following:

- PCAuthorize® attempts to determine whether this is a real duplicate. It does this by scanning all transactions in the batch for a matching authorization number. If a matching reference number is found, then it is an indication that the transaction is a valid duplicate.

- Conversely, if a matching reference number is not found, it can be assumed a prior failure occurred, and the authorization and reference number should be used for the transaction.

- Regardless of the search outcome, PCAuthorize® adds a Force Duplicate Transaction checkbox to the Transaction screen. If this transaction is a true duplicate, check the box and click the **Authorize** button. PCAuthorize® will force the transaction to be authorized and captured.

- If the duplicate transaction is the result of a prior failure, then simply record the authorization number and close the Transaction screen.

Settlement

Depending on your MAPP host setup, you must either settle each batch or let the MAPP host close the batch at a fixed time each evening. Check with your bank to see which option you should use. We recommend that you either settle

each batch at the end of your business day or, if the MAPP host closes and settles automatically, be sure to close your batch at the end of the day.

The MAPP settlement function compares the host totals with the PCAuthorize® totals. If the totals match, the batch is closed and marked as "settled."

Host transaction counts are not retained, only total dollar amount, so they will be zero in the initial Settlement screen. Once a settlement is sent to the host, the Settlement screen will show the host transaction count and amount.

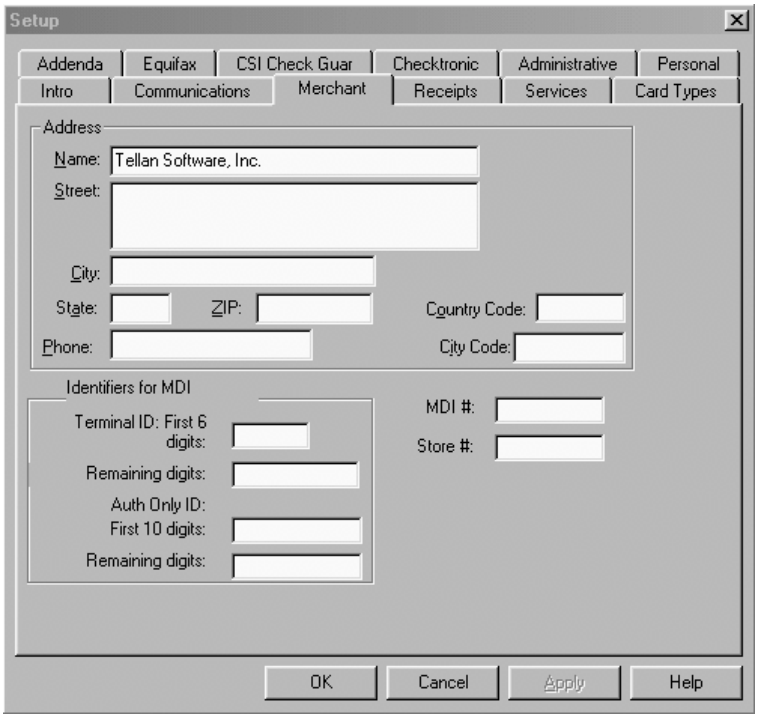
If the batch does not settle, then you must adjust the transactions by voiding, crediting, or post-authorizing the appropriate transactions.

Address Verification

If the transaction is approved, PCAuthorize® will automatically send a Post Authorization to MAPP to record for deposit.

Global Payment – Modular Data

Merchant Setup



- Complete the Merchant Name and Address section.

- The Country Code and City Code are not required.

- The Modular Data terminal identifier is a maximum of 16 characters. Obtain the terminal identifier from your bank account representative. Enter the first six characters of the terminal identifier and the remaining characters of the terminal identifier in the appropriate fields in the Identifiers Merchant Number section.

- If you plan to do Authorization-Only transactions (no electronic deposit), then a separate terminal identifier should be entered in the appropriate field.

Voids

Always use the **Void** button to void a transaction. Voids must be authorized. Be sure to click the **Authorize** button after voiding a transaction.

Settlement

There is no settlement procedure for Modular Data. Modular Data settles all transactions automatically at midnight Pacific time. You should open a new batch each business day. You may check your total captured amounts for the day using the Interactive Balance function described below.

Interactive Balance

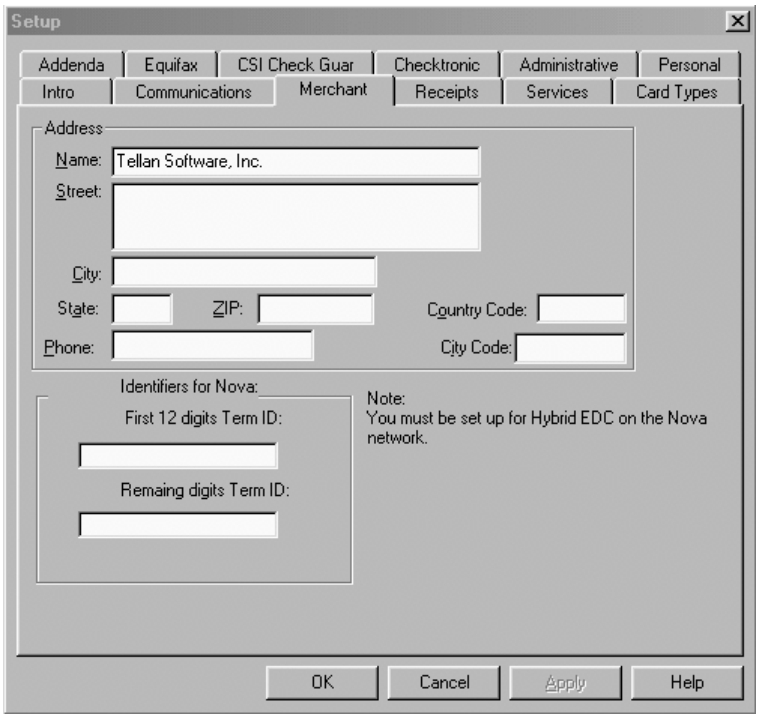
The Modular Data plug-in module provides an Interactive Balance feature. Access this feature by selecting Interactive Balance from the Transactions menu.

This feature provides today's totals for the following card-type categories:

- Visa/MasterCard
- Discover Card
- American Express
- Diner's Club/Carte Blanche

Nova

Merchant Setup



Most fields in the Merchant screen are required.

- Complete the Merchant Name and Address section according to bank guidelines.
- The Country Code and City Code are not required.
- All items in the Identifiers section must be completed. Obtain the information from your bank account representative.

Batch and Item Numbers

When a new batch is opened it is not assigned a batch number and appears as "???" until the first transaction is authorized and captured. Once you authorize the first transaction, the batch number is assigned from the host.

The transaction item number is assigned by the Nova network. This number starts at "1" at the beginning of the day and is incremented for each transaction during the day.

Settlement

You *must* settle each batch. We recommend that you settle each day's transactions at the end of the day. If this is not done on a timely basis, your discount rate may be higher. The settlement function transmits all transactions to the merchant bank host. Depending on the number of transactions, this may take some time.

Interactive Balance

The Nova plug-in module provides an Interactive Balance feature. You should only use this feature if you cannot settle your batch due to an out-of-balance situation.

The Interactive Balance feature is accessed from the Transactions menu. It provides the following functions and information:

- Batch Inquiry—Retrieves information about the total dollar amount in the batch as stored on the Nova network host. The response message indicates the batch number, number of items, and dollar value.

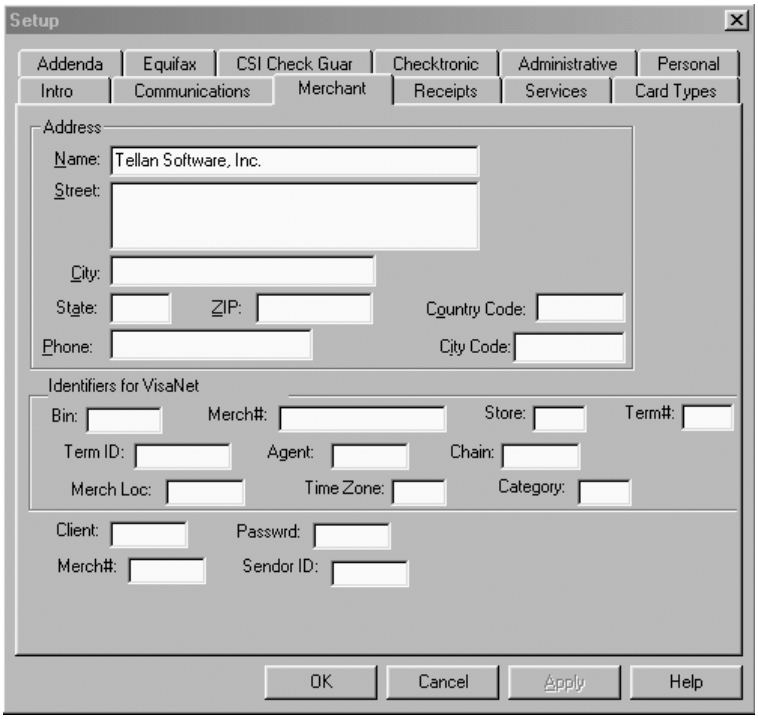
- Clear Host—Under very rare circumstances it may be necessary to clear the transactions in the currently-open batch at the Nova host. When you use the Clear Host request, the Nova host deletes the detail records for the transactions in the currently-open batch. You must then use the Post Authorization transaction to reenter the transactions from

paper backup before attempting to settle the batch. Do not use this transaction unless specifically instructed to do so by Nova or Tellan.

VisaNet

This plug-in module supports the latest K – Terminal Enhanced Second Generation formats and corresponding settlement. Prior formats are available on special request.

Merchant Setup



Most fields in the Merchant screen are required.

- Complete the Merchant Name and Address section according to bank guidelines. Your merchant name, city, and other identifying information are transmitted upon electronic draft settlement. Ensure they are correct.

- The Country Code is 840 for the United States.

- The City Code is generally the first five digits of your Zip code.

- All items in the Identifiers section must be completed. Obtain the information from your bank account representative.

- Enter the Time Zone:

  - 108 (Pacific Standard Time)
  - 107 (Mountain Time)
  - 106 (Central Time)
  - 105 (Eastern Standard Time)

- The Category Code is a four-digit Standard Industry Classification code. These codes are a subset of the Merchant Classification Code Guide published by the American Banking Association. Mail or telephone-order businesses must use SIC codes from 5960 to 5969.

- The Agent, Chain, and Merchant Lock # fields are required. If your bank does not use them, fill these fields with zeros.

Authorization

Return/Credits, Post Authorizations and voided items are not individually authorized; when you enter these transactions, simply click the **Record** button. If you void a transaction, the screen will be closed and the transaction flagged as "voided."

Settlement

You *must* settle each batch. We recommend that you settle each day's transactions at the end of the day. If this is not done on a timely basis, your discount rate may be higher. The settlement function transmits all transactions to the merchant bank host. Depending on the number of transactions, this may take some time.

Host totals are not retained, so they will appear as zero in the Settlement screen.

Glossary

Account number. The card account number is the primary number embossed on the credit card.

Acquirer. Any merchant, store, mail-order business, etc., who accepts a credit card as payment.

Address verification. A function of many bank networks where you can verify the street address and/or Zip code for an account number. Used primarily by mail-order business to prevent fraud.

Agency. A bank network which accepts credit authorization requests.

ATM card. Automated Teller Machine card. A card which immediately deducts the amount indicated from the cardholder's account.

Authorization network. A bank computer system which authorizes credit card transactions.

Authorization code. A code returned to PCAuthorize® if a transaction was approved. This code is recorded on the sales slip as proof the transaction was authorized.

Authorize. The process in a credit card transaction where the cardholder's account is verified as being in good standing. Generally, an authorization lowers the cardholder's available credit limit and guarantees the merchant will receive the money.

Authorize only. A transaction where a transaction is authorized and no electronic draft capture is made.

Batch. A set of transactions. This is generally a business day's worth of transactions. Most bank networks number a merchant's batches sequentially starting with 1 or 100, etc.

Baud rate. The speed at which a modem transmits data.

Card type. Major type of card; i.e., Credit, Travel and Entertainment (T&E), etc.

Chargeback. A situation where a customer disputes a credit card purchase. You may be asked to provide proof of the authorization.

Check guarantee. Process where a check is guaranteed.

DDE. A feature of Windows allowing different applications to directly transmit information among themselves.

Debit card. An ATM or other card which immediately deducts the amount from the cardholder's account.

Decline. A transaction is normally declined when a cardholder has exceeded his credit limit.

Demo mode. A feature of PCAuthorize® allowing you to practice entering transactions without actually dialing a bank network.

Dial type. Type of telephone system dialing, either pulse (old, outdated method), or tone (which most telephone systems now support).

Discount rate. A percentage the bank takes of each transaction for processing and handling your merchant bank account.

Discounted totals. Amount after the discount rate has been applied.

Draft capture. See "Electronic draft capture."

Electronic draft capture. If a transaction is approved, the amount is automatically deposited to the merchant bank account and billed to the cardholder. This process eliminates sending paper drafts to the bank.

Expiration date. The expiration date on the credit card. Usually expressed in *mm/yy* format.

Export. Process where transactions in a batch are copied into a text file that can then be used by other applications.

Force transaction. See "Post authorization."

Hold card. A response from the bank network indicating you should not return the card to the customer (if it is safe to do so). You should call the bank customer support center to inform them of the disposition of the card.

Host. Authorization network computer.

Host capture. Transactions are captured and held for deposit in the bank's host computer at the time they are authorized.

Host totals. The total amount of a batch held on the host computer.

Import. Process of reading a text file into PCAuthorize® to create new transactions.

Issuer. The bank which issued the credit card.

Magnetic stripe. A stripe on the back of a credit card which contains certain information.

Magnetic stripe entry. The process of swiping a credit card though a magnetic stripe reader. PCAuthorize® extracts the account number and expiration date from the stripe.

Magnetic stripe reader. A device which reads the magnetic stripe.

Manual entry. The process of manually keying in the credit card number.

MICR. Magnetic Ink Character Recognition. The numbers across the bottom of all checks which may be read by a computer.

Modem init string. A string of commands (called Hayes or AT commands) which set options in the modem.

Multiagency. A function of PCAuthorize® allowing different agencies to authorize and/or settle certain card types; e.g., all American Express cards may be directly authorized and settled via the American Express Network.

Network plug-in module. A separate icon which tells PCAuthorize® how to interface to a bank network.

PIP. A term used by American Express to allow PCAuthorize® to directly dial their network for credit authorization.

Point-of-sale. POS. The place where a sale is made, usually a check-out counter.

Port. The connection for a modem or printer.

Post authorization. A transaction type where the authorization has been obtained over the telephone and is being recorded for electronic deposit.

Private label card. A credit card usually issued by a department store, etc.

Purchase card. A special card used for business purchases.

Reference number. An identifying number returned by the bank network for a particular transaction. Not all networks return a reference number. This is not to be confused with the authorization number.

Referral. When you get a response which indicates you are to call the authorization center for further instructions.

Referral number. See “Reference number.”

Return/Credit. When a customer returns merchandise and you credit their credit-card account.

Sale/deposit. A transaction which is authorized and then deposited.

Send. Used for mail or telephone-orders when the customer is not present. See also “Take.”

Settle totals. Total amount of a batch that is to be settled.

Settlement. The process where a batch is balanced and released for deposit.

Split-dial. A function of PCAuthorize® allowing different agencies to authorize and/or settle certain card types; e.g., all American Express cards may be directly authorized and settled via the American Express Network.

T&E. Travel and Entertainment. Cards such as American Express.

Take. Used when the customer is present and will be taking the merchandise. See also “Send.”

Terminal capture. The process whereby PCAuthorize® holds each transaction as it is authorized, and then transmits the entire batch to the bank upon settlement.

Transaction. Any authorization, credit, or void of a credit card.

Transaction type. Indicates whether the transaction is a sale, return, post authorization, etc.

Void. Making a transaction null and void; i.e., reversing the transaction.

Wedge. A magnetic stripe reader.

Appendix A: Exchanging Information

Exporting Transactions

Exporting transactions allows you to create data in text files. These files can then be used with other applications such as Microsoft Excel, Microsoft Access, etc.

If the Transaction List screen is open, the records shown will be exported in the order they are shown. If the Transaction List screen is closed, the entire batch will be exported in the original order entry.

Export Formats

The exported file is in ASCII (Text) format. It is important to note that some data items are in a "coded" form, such as the transaction type. The export data items and their standard coded form are listed below. The coded form of some items may be configured by your bank. If your bank supplies you with additional data, use it rather than the information here.

Item name	Description
•Filler•	Places a blank item in the export file
Account Number	Primary account number
Account Source	Account source
Address Ver Address	Address verification address
Address Ver Resp Code	Response code for address verification
Address Ver Resp Text	Response text for address verification
Address Ver Zip	Address verification Zip code
Amount	Amount of transaction

Amount, Tax	Tax amount
Amount, Tip	Tip or other charge amount
Amount, Line 1	Amount for line item 1
Amount, Line 2	Amount for line item 2
Amount, Line 3	Amount for line item 3
Amount, Line 4	Amount for line item 4

Item name	Description
Auth Code	Authorization code from bank
Auth Source	Source of authorization from bank
Batch Number	Batch number
Card Type	Type of card: CC – Credit TE – T&E card PL – Private label card MN – MICR number DL – Driver's license
Initials	Sales person's initials
Customer ID	Any ID up to 17 characters
Department	Department ID up to 5 characters
Description Line 1	Item description for line 1
Description Line 2	Item description for line 2
Description Line 3	Item description for line 3
Description Line 4	Item description for line 4
Driver's License State	State code from driver's license
Expiration date	Expiration date from card
Merchant Name	From Merchant screen
Merchant Address	From Merchant screen
Merchant BIN	From Merchant screen
Merchant City	From Merchant screen
Merchant City Code	From Merchant screen
Merchant Country Code	From Merchant screen
Merchant State	From Merchant screen
Merchant Telephone	From Merchant screen
Merchant Number	From Merchant screen
Merchant Time Zone	From Merchant screen
Merchant ZIP	From Merchant screen
Operator Initials	From Personal screen

Operator name	From Personal screen
Operator Number	From Personal screen
PS Amount	PS2000 amount
PS Currency	PS2000 currency
PS Indicator	PS2000 indicator
PS ID	PS2000 identifier
PS Response	PS2000 response

Item name	Description
PS Validation	PS2000 validation code
Reference Number	Transaction reference number from bank
Response Code	Transaction response code from bank. See your bank network plug-in module documentation for more information
Response Text	Transaction response text from bank. See your bank network plug-in module documentation for more information
SE Number	Transaction service establishment number
Status, Transaction	Transaction status: PD – Pending AA – Authorized ND – Declined NR – Referral E1 – Error F1 – Hold call
Store Number	Store number from Merchant screen
Transaction Month/Day	Transaction date in format *mmdd*
Transaction Number	Transaction item number
Transaction Resp Date	Authorization date in format *mmdd*
Transaction Settle Date	Settlement date in format *mmdd*
Transaction Time	Transaction time in format *hhmmss*
Transaction Trace	Trace number from bank
Transaction Type	Transaction type: NA – Normal authorize AO – Authorize only CR – Return/credit VD – Void PA – Post authorization
Terminal Number	Terminal number from Merchant screen

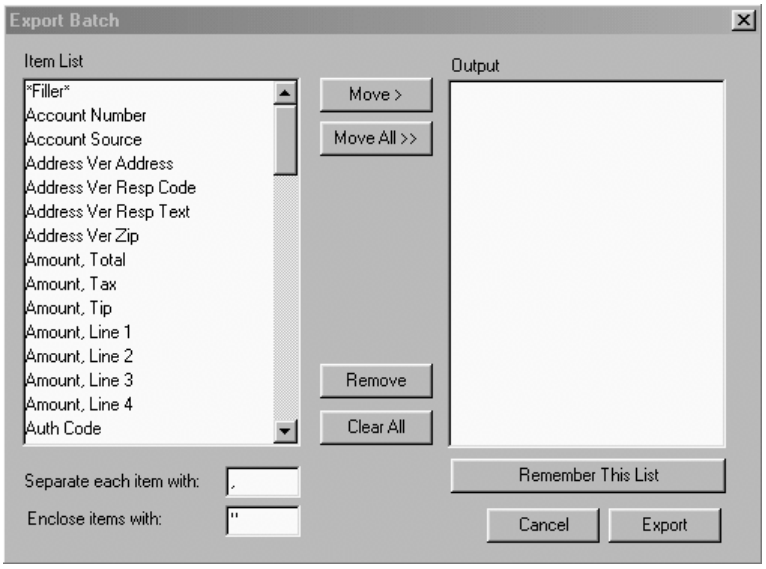
Terminal ID	Terminal ID from Merchant screen
Terminal Category	Terminal category from Merchant screen
Voided	Void flag: Void No

Export Procedures

To export a batch:

1. Open the batch you wish to export, if it is not already open. See the instructions under "Opening an Existing Batch."

2. Select **Export Batch** from the File menu. The following screen displays:



Double click on each item in the Item List column (or click on the item and then click on the **Move** button) to move each field to the Output column. The data items will be exported in the order shown in the Output column, so plan which items you wish to export.

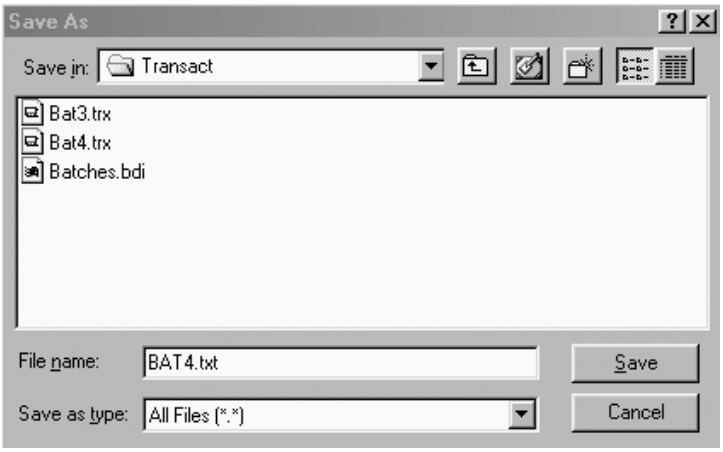
Use the **Remove** and **Clear All** buttons to either remove an individual item, or clear all items from the Output column.

The **Separate each item with** field allows you to select the delimiter to be used between each data item. Use a "t" if the separating character is a tab.

The **Enclose items with** field allows you to surround data items containing blanks or quotation marks or other punctuation.

If you frequently export batches, you can click the **Remember This List** button once all data items have been moved to the Output column. The list will then be saved in your Setup file so you don't have to recreate it each time.

3. Click the **Export** button. A standard dialog box displays. Type the file name under which you wish to save the batch, and then click the **Save** button.



PCAuthorize® creates the file for you and exports the data specified to the file.

Importing Transactions

Importing transactions allows you to create transactions from data in text files. These files can be created by other applications such as Microsoft Excel, Claris FileMaker, etc.

Import Formats

The import file must be in ASCII (text) format. It is important to note that some data items are in a “coded form, such as the transaction type. The import data items and their standard coded form are listed below. The coded form of some items may be configured by your bank or Tellan Software and is dependent on the bank network plug-in module you are using. If your bank supplies you with additional data, use it rather than the information here.

> *Note*: For an imported transaction to be complete, you must have an Account Number, the Expiration Date, and the Amount. All other items are optional.

Item name	Description
•Filler•	Skips over and ignores the input item
Account Number	Card account number
Address Ver Address	Address verification address line
Address Ver Zip	Address verification Zip
Amount, Total	Total amount of transaction. If other amounts are imported, this amount is adjusted accordingly. If the amount is negative, the transaction is automatically changed to a Credit/Return.
Amount, Tax	Tax amount
Amount, Tip	Tip or other charge amount
Amount, Line 1	Amount for line item 1

Amount, Line 2	Amount for line item 2
Amount, Line 3	Amount for line item 3
Amount, Line 4	Amount for line item 4
Auth Code	Authorization code. Import this only if you are importing post-authorization-type transactions.

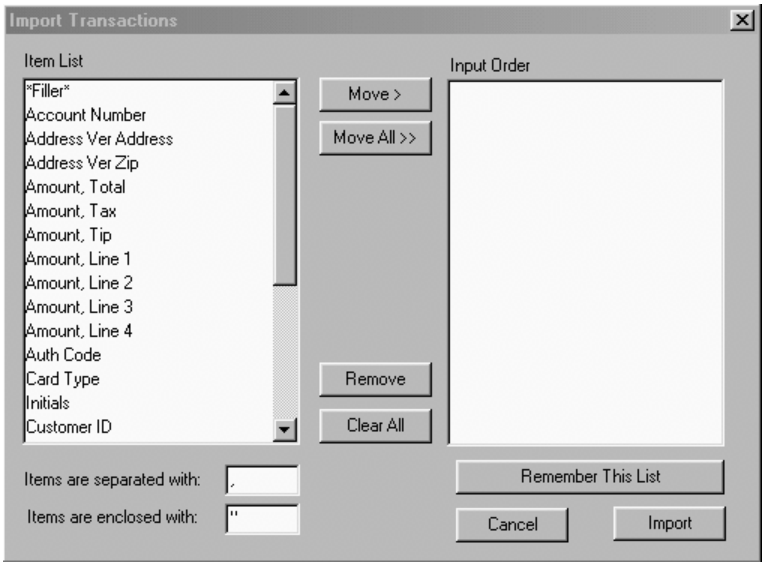
Item name	Description
Card Type	Type of card: CC – Credit TE – T&E card PL – Private label card MN – MICR number DL – Driver's license
Initials	Sales person's initials
Customer ID	Any ID up to 17 characters
Department	Department ID up to 5 characters
Description Line 1	Item description for line 1
Description Line 2	Item description for line 2
Description Line 3	Item description for line 3
Description Line 4	Item description for line 4
Driver's License State	Two-character state code for check guarantee transactions only
Expiration date	Expiration date. May be in the format *mmyy*, *mm/yy*, or *m/yy*
Invoice Number	Up to 12 characters of invoice number
Reference Number	Transaction reference number. Use only in special circumstances for certain types of voids.
Transaction Type	Type of transaction: NA – Normal authorize AO – Authorize only CR – Return/credit VD – Void PA – Post authorization

Import Procedures

To import a set of transactions:

1. Open the batch you wish to import, if it is not already open. See the instructions under “Opening an Existing Batch.”

2. Select **Import Transactions** from the File menu. The following screen displays:



Double click on each item in the Item List column (or click on the item and then click on the **Move** button) to move each field to the Input Order column. The data items will be imported in the order shown in the Input Order column, so plan which items you wish to import.

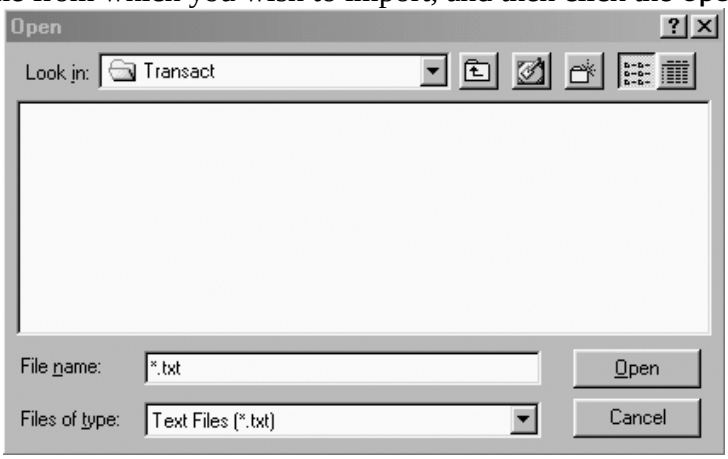
Use the **Remove** and **Clear All** buttons to either remove an individual item, or clear all items from the Input Order column.

The **Items are separated with** field allows you to select the delimiter to be used between each data item. Use a “t” if the separating character is a tab.

The **Items are enclosed with** field allows you to surround data items containing blanks or quotation marks or other punctuation.

If you frequently import transactions, you can click the **Remember This List** button once all data items have been moved to the Input Order column. The list will then be saved in your Setup file so you don't have to recreate it each time.

3. Click the **Import** button. A standard dialog box displays. Type the file name from which you wish to import, and then click the **Open** button.



PCAuthorize® will read the import file and create the new transactions based on the imported ASCII file.

The import process is a "two-pass" process. If there are errors in the import file, you will be asked if you wish to continue. If not, click **Cancel** in the appropriate dialog box.

If you choose to continue to import transactions when errors are present, transactions imported in error will be flagged with an error icon along with an error message. Be sure to correct any errors as a result of the import.

All imported transactions are appended to the end of the currently-open batch and assigned the appropriate batch and item numbers.

Appendix B: Interapplication Communication

> *Note*: This appendix contains technical information intended for use primarily by developers.

Other applications can communicate with PCAuthorize® using Dynamic Data Exchange (DDE) and/or named pipes.

Additional detail information about DDE is provided on your diskette in the directory labeled DDE. Included are general instructions, along with specific instructions and examples for popular databases and applications.

Dynamic Data Exchange

Introduction

PCAuthorize® can receive transactions from any application capable of sending DDE messages. This includes Microsoft Excel, Microsoft Access, and many others.

This section presents general information on using DDE to interact with PCAuthorize® for the purpose of retrieving and authorizing credit card and other sale transactions.

Audience

This appendix is aimed at those organizations that require access to selected transaction data maintained by PCAuthorize®, and is oriented to software development personnel.

This appendix assumes the reader has a working knowledge of the basics of Dynamic Data Exchange (DDE). It also assumes the reader can read and understand Microsoft Visual Basic for Applications source code. There is no attempt made to provide a tutorial on either DDE programming or the Visual Basic language.

DDE Overview

Dynamic Data Exchange (DDE) is a protocol that permits two applications to communicate by continuously and automatically exchanging data through a DDE "channel." To control a DDE conversation between two applications, you establish a channel, select a topic, request and send data, and then close the channel. The following table lists the tasks that Microsoft Excel performs with DDE and the methods used to control each task in Visual Basic.

Task	Method
Starting DDE	DDEInitiate
Getting text from another application	DDERequest
Sending text to another application	DDEPoke
Carrying out a command in another application	DDEExecute
Ending DDE	DDETerminate

To communicate with PCAuthorize®, only DDEInitiate, DDERequest, and DDETerminate are used. Refer to the PCAuthorize® sample DDE applications.

Service Names, Topic Names, and Item Names

A DDE server uses a three-level hierarchy—service name, topic name, and item name—to uniquely identify an item of data the server can exchange during a conversation.

Service Names

A server name is a string to which a server application responds when a client attempts to establish a conversation with the server. A client must specify this service name to establish a conversation with the server. The service name may or may not be the same as the executable program name of the application. In the case of PCAuthorize®, the service name "PCAuthorize" is, in fact, not the same as the executable name, "PCAuth.exe."

Topic Names

A topic name is a string that identifies a logical data context. A client must specify a topic name along with the server's service name when it attempts to establish a conversation with a server.

PCAuthorize® supports the standard service name "System," and four application-specific names: GetBatches, GetBatch, AuthorizeTransaction, and StoreTransaction.

Item Names

An item name is a string that identifies a unit of data a server can pass to a client during a transaction. PCAuthorize® only supports item names under the "System" topic name. The "System" topic names supported by PCAuthorize® are : Topics, SysItems, Formats, Status, and Help.

PCAuthorize® does not support item names under its application-specific service names because there is only one item type supported for each service. For example, to authorize a transaction, the service name is "AuthorizeTransaction" and the request item is the data representing the transaction to be authorized. No other items have meaning under the "AuthorizeTransaction" service.

Making Requests

To make a request to PCAuthorize®:

- Establish a connection for the desired topic (DDEInitiate).
- Pass one or more requests (DDERequest).

- Terminate the connection (DDETerminate).

It is good practice to always terminate the connection when you no longer need to make requests for the initiated topic. Failure to do so may eventually result in the exhaustion of system resources.

System Topic

The System topic provides a context for information of general interest to any DDE client.

Formats

The Formats item name is defined as a tab-delimited list of strings representing all clipboard formats potentially supported by the service application.

PCAuthorize® only supports one format:

```
Text
```

Help

The Help item name is defined as a user-readable information of general interest.

PCAuthorize® responds to the Help item name with the string:

```
The supported topics are:
System: PCAuthorize DDE server services.
GetBatches: Get a list of batches.
GetBatch: Get a list of transactions in a batch.
AuthorizeTransaction: Authorize a transaction.
StoreTransaction: Store a transaction.

The supported System items are:
Topics: Get a topic list.
SysItems: Get an item list for this topic.
Status: Get a server status: “Ready” or “Busy”.
Formats: Get a format list.
```

```
Help: Get help info (print this message).
```

This Help text is returned by PCAuthorize® as a single, null-terminated string, with imbedded “carriage return” “new line” (0D0A16) characters at the end of each logical line of text.

Status

The Status item name requests the current status of the DDE Server (PCAuthorize).

PCAuthorize® responds to the Status request with the text string:

```
Ready
```

SysItems

The SysItems item name requests the list of items supported under the System topic.

PCAuthorize® responds to the SysItems request with the text string:

```
Topics   SysItems   Status   Formats   Help
```

This SysItems text is returned by PCAuthorize® as a single, null-terminated string, with a “tab” (0916) character between each item.

Topics

The Topics item name requests a list of topics supported by the server.

PCAuthorize® responds to the Topics request with the text string:

```
System   GetBatches   GetBatch   AuthorizeTransaction
StoreTransaction
```

This Topics text is returned by PCAuthorize® as a single, null-terminated string with a “tab” (0916) character between each topic.

Sample

The following is a code sample for retrieving Help:

```
channelNumber=Application.DDEInitiate(“PCAuthorize”,”System”)
returnList=Application.DDERequest(channelNumber,”Help”)
Application.DDETerminate channelNumber
```

GetBatches

GetBatches is the request that a DDE client uses to obtain a list of one or more of the batches currently in PCAuthorize®.

To get a list of batches, you begin by initiating a conversation with PCAuthorize® with a topic name of “GetBatches.” If this connection is successful, you may begin requesting bathes by passing a message constructed of the string “Tela00001031” plus a tab character (0916), plus the relative record number of the batch desired. PCAuthorize® will respond with a message of the form described under “Batch Data Format” later in this appendix. If no batch corresponding to the relative record number exists, the response message will be a series of empty fields.

The following sample illustrates how to retrieve all the currently-available batches.

```
ChannelNumber = DDEInitiare(“PCAuthorize”, “GetBatches”)

iBatch = 0
Do
       iBatch = iBatch + 1
       szBatchReq = “Tela00001031” + Chr$(9) + CStr(iBatch)
       szReturnList = DDERequest(channelNumber, szBatchReq)
       iFieldCnt = ddeParse[1](szReturnList, szFields())
       If szFields(1) = “” Then
              Exit Do
       End If
              •
              •     process batch
              •

Loop

DDETerminate channelNumber
```

[1]ddeParse is a sample function that parses the fields from each batch record and stores them in sequential elements of an array (szFields).

The following is a sample of the results of the preceding code instructions when loaded into an Excel spreadsheet. Note that the formatting of currency values was supplied by the spreadsheet, not by PCAuthorize®.

Status	Batch	Pending	Pending Amount	Submitted	Submitted Amount	RespText
OPN	1	26	$6.00	0	$0.00	
OPN	2	28	$143,795.00	0	$0.00	
OPN	3	9	$16,888.00	0	$0.00	
OPN	4	1	$21.00	1	$21.00	
OPN	5	1	$21.00	1	$21.00	
OPN	6	10	$625.00	2	$42.00	
ERR	7	0	$0.00	0	$0.00	

GetBatch

GetBatch is the request that a DDE client uses to obtain a list of one or more of the transactions in the batch that is currently open in PCAuthorize®.

To retrieve the transactions in the currently-open batch, you begin by initiating a conversation with PCAuthorize® with a topic name of "GetBatch." (Remember, there must be an open batch in PCAuthorize® in order for this request to be successful.) If the connection is successful, you may begin requesting transactions by passing a message constructed of the string "Tela00001011" plus a tab character (0916), plus the relative record number of the transaction desired. PCAuthorize® will respond with a message of the form described under "Transaction Data Formats" later in this appendix. If no transaction corresponding to the transaction number exists, the response message will be a series of empty fields.

The following sample illustrates how to retrieve all the transactions in the currently-open batch.

```
ChannelNumber = DDEInitiare(“PCAuthorize”, “GetBatch”)

iTran = 0
Do
       iTran = iTran + 1
       szBatchReq = “Tela00001011” + Chr$(9) + CStr(iTran)
       szReturnList = DDERequest(channelNumber, szBatchReq)
       iFieldCnt = ddeParse[2](szReturnList, szFields())
       If szFields(1) = “” Then
              Exit Do
       End If
              •
              •    process batch
              •

Loop

DDETerminate channelNumber
```

The following is a sample of the results of the preceding code instructions when loaded into an Excel spreadsheet. Note that the formatting of currency values was supplied by the spreadsheet, not by PCAuthorize®.

Tran Type	CardType	Account Number	ExpDate	Amount	Rsrved	Issuer	Src	Status
SALE	CC	4012345678990	1198	$21.00	0	Othr	N	Approved
SALE	CC	370000000000002	1298	$21.00	0	Othr	N	Approved
SALE	CC	4012345678990	1198	$21.00	0	Othr	N	Pending

AuthCode	RespText	Refnum	MMDD	HHMM	Settle Tot	Batch#	Item#	AVS Code
Demo16	Approved	702	1434	$42.00	6	1		
Demo17	Approved	702	1508	$42.00	6	2		

[2]ddeParse is a sample function that parses the fields from each batch record and stores them in sequential elements of an array (szFields).

AuthorizeTransaction

AuthorizeTransaction is the request that a DDE client uses to instruct PCAuthorize® to authorize a transaction supplied by the client.

To authorize a transaction, initiate a conversation with PCAuthorize® with a topic name of "AuthorizeTransaction." (Remember, there must be an open batch in PCAuthorize® in order for this request to be successful.) If the connection is successful, you may pass a message constructed of the string "Tela00001011" plus a tab character (0916), plus the fields of the transaction. The fields in the transaction portion of the message must conform to those described under "Transaction Data Formats" later in this appendix. The fields must be tab delimited, but should not be followed by a "carriage return" "new line" (0D0A16) sequence.

You are only required to supply an account number, an expiration date, and an amount. All other fields may be empty (""). (Note that additional fields may be required to achieve the best bank discount rates. Refer to your bank network plug-in documentation for more information.) PCAuthorize® will respond with a message of the form described under "Transaction Data Formats."

The following code sample illustrates how to construct a transaction from a row in an Excel spreadsheet.

```
ChannelNumber = DDEInitiare("PCAuthorize", "AuthorizeTransaction")


szTransaction = "Tela00001011" + Chr$(9)
For i = 1 To r.Columns.Count
       szTransaction = szTransaction + CStr(r.Cells(1,I))
       If i < r.Columns.Count Then
              szTransaction = szTransaction + Chr(9)
       End If
Next i
```

```
returnList = Application.DDERequest(channelNumber,szTransaction)

DDETerminate channelNumber
```

The following is a sample of the results of the preceding code instructions when loaded into an Excel spreadsheet. Note that the formatting of currency values was supplied by the spreadsheet, not by PCAuthorize®.

TranCode	CardType	Account Number	ExpDate	Amount	Rsrved	Issuer	Source	Status
SALE	CC	4012345678990	1198	$21.00	0	Othr	N	Approved

AuthCode	RespText	Refnum	MMDD	HHMM	Settle Tot	Batch#	Item#	AVS Code
123456	AP123456		714	1623	42	6	15	
Demo17	Approved		702	1508	$42.00	6	2	

StoreTransaction

StoreTransaction is the request that a DDE client uses to instruct PCAuthorize® to store a transaction, supplied by the client, into the currently-open batch.

To store a transaction, initiate a conversation with PCAuthorize® with a topic name of “StoreTransaction.” (Remember, there must be an open batch in PCAuthorize® for this request to be successful.) If the connection is successful, you may pass a message constructed of the string “Tela00001011” plus a tab character (0916), plus the fields of the transaction. The fields in the transaction portion of the message must conform to those described under “Transaction Data Formats” later in this appendix. The fields must be tab delimited, but should not be followed by a “carriage return” “new line” (0D0A16) sequence.

You are only required to supply an account number, an expiration date, and an amount. All other fields may be empty (“”). (Note that additional fields may be required to achieve the best bank discount rates. Refer to your bank network plug-in documentation for more information.)

PCAuthorize® will respond with a message of the form described under "Transaction Data Formats."

The following sample illustrates how to construct a transaction from a row in an Excel spreadsheet.

```
ChannelNumber = DDEInitiare("PCAuthorize", "StoreTransaction")


    szTransaction = "Tela00001011" + Chr(9)
    For i = 1 To r.Columns.Count
           szTransaction = szTransaction + CStr(r.Cells(1,I))
           If i < r.Columns.Count Then
                  szTransaction = szTransaction + Chr(9)
           End If
    Next i

    returnList = Application.DDERequest(channelNumber,szTransaction)

    DDETerminate channelNumber
```

The following is a sample of the results of the preceding code instructions when loaded into an Excel spreadsheet. Note that the formatting of currency values was supplied by the spreadsheet, not by PCAuthorize®.

TranCode	CardType	Account Number	ExpDate	Amount	Rsrved	Issuer	Source	Status
SALE	CC	4012345678990	1198	$54.32	0	MC	N	

AuthCode	RespText	Refnum	MMDD	HHMM	Settle Tot	Batch#	Item#	AVS Code
			714	1623				

Data Formats

All PCAuthorize®-specific requests and responses of more than one field are tab (0916) delimited. Responses of more than one field are terminated by a "carriage return" "new line" (0D0A16) sequence.

For example, a transaction response might look like:

```
00000000 53 41 4C 45 09 43 43 09-35 34 33 35 34 35 34 33 SALE.CC.54354543
00000010 33 09 31 32 39 38 09 35-34 2E 33 32 09 30 09 4D 3.1298.54.32.0.M
00000020 43 09 4E 09 45 72 72 6F-72 09 09 21 41 63 63 6F C.N.Error..!Acco
00000030 75 6E 74 20 74 6F 6F 20-73 68 6F 72 74 09 09 37 unt too short..7
00000040 31 34 09 31 36 32 33 09-34 32 09 36 09 31 35 09 14.1623.42.6.15.
00000050 0D 0A
```

The primary two data messages contain either transaction data or batch data.

Transaction Data Formats

Request Format

Field Name	Attributes	Description
Header	Header Constant	"Tela00001011" + Chr(9)
TranType	One of: SALE, AUTHONLY, CREDIT, POSTAUTH, NA, AO, CR, PA	Transaction Type (Defaults to Personal setup setting)
CardType	One of: CC,TE,DB,MN,DL,PL	Card Type (Defaults to Personal setup setting)
Account	Text	Card account number, MICR number for check guarantee, etc.
ExpDate	Four numeric digits	Expiration date
Amount	Currency	Amount of transaction
AuthCode	Authorization Code	Send only if post authorization
Driver's License State	Two-character state code	Send only if check guarantee
Street Address	Text	Send only if using address verification
ZIP	Numeric	Send only if using address verification
Invoice Number	Text	Required for best bank discount rate
Customer ID	Text	Customer identifier
Cashier ID	Text – maximum 3 characters	Initials of clerk or cashier
Department	Text – maximum 5 characters	Department code
Tax	Currency	Tax
Shipping or Tip	Currency	Required for best bank discount rate for purchase cards
Description Line 1	Text	Optional description
Amount Line 1	Currency	Optional amount
Description Line 2	Text	Optional description
Amount Line 2	Currency	Optional amount
Description Line 3	Text	Optional description
Amount Line 3	Currency	Optional amount

Description Line 4	Text	Optional description
Amount Line 4	Currency	Optional amount

Response Format

Field Name	**Attributes**	**Description**
TranType	One of: SALE, AUTHONLY, CREDIT, POSTAUTH, NA, AO, CR, PA	Transaction type
CardType	One of: CC,TE,DB,MN,DL,PL	Card type
Account	Numeric	Card account number, MICR number for check guarantee, etc.
ExpDate	Four numeric digits (*mmdd*)	Expiration date
Amount	Currency	Amount of transaction
Rsrved	NA	Reserved for future use
Issuer	One of: Visa, MC, Amex, Ctbl,, Dinr, Disc, JCB, Othr	Issuer card type
Source	One of: N or Y	Account data source – N=Manual; Y=Mag Stripe
Status	One of: Pending, Approved, Declined, Call, Error, HoldCall, PD, AA, ND, NR, E1, F1	Transaction status
AuthCode	Numeric	Authorization number
RespText	Text	Response text from the bank network
RefNum	Numeric	Reference number from the bank network
MMDD	Four numeric digits (*mmdd*)	Date of transaction
HHMM	Four numeric digits (*hhmm*)	Time of transaction
SettleTot	Currency	Net settlement amount
Batch#	Numeric	Batch number
Item#	Numeric	Item number
AVS Code		Address verification result code

Batch Data Format

Field Name	Attributes	Description
Status	One of: ERR, OPN, STL	Batch status
Batch	Numeric	Batch number
Pending	Numeric	Total number of items in batch
Pending Amount	Currency	Total amount of items in batch
Submitted	Numeric	Total number of items submitted
SubmittedAmount	Currency	Total amount of items submitted
RespText	Text	Response text

Named Pipes

Introduction

This section presents general information on using named pipes to interact with PCAuthorize®. This section assumes the reader has a working knowledge of Windows NT and named pipes. There is no attempt made to provide a tutorial on NT internals and named pipes.

Named pipe supports only an authorize function. Data management functions are not currently supported.

Named Pipes Overview

If PCAuthorize® detects it is running under Windows NT, it opens a named pipe. The named pipe is for the local machine only, and allows one connection at a time. This does not, however, prevent more than one transaction from being processed since NT queues transactions via the named pipe mechanism. The named pipe is named: \\.\PIPE\PCAuthorize

Generally, the Call Named Pipe function should be used to send a data packet to PCAuthorize® and receive a response. The format of the data packet is identical to the Authorize transaction format described under DDE.

The following is a sample piece of code written in C to demonstrate the named pipe call:

```
char transString[2048] = “Tela00001011\t\t\t4012345678990\t1299\t1.00”;
DWORD             retLen = 0;
BOOL pipeRet = FALSE;
DWORD BytesRead;
do {
   char pipeName[] = \\\\.\\PIPE\\PCAuthorize;
   pipeRet = CallNamed Pipe(pipeName,   // pointer to pipe name
                 transString,   // pointer to write buffer
                 strlen(transString),  // size, in bytes, of write buffer
                 transString,  // pointer to read buffer
                 sizeof(transString),  // size, in bytes, of read buffer
                 &BytesRead,   // pointer to number of bytes read
                 60000  // time-out time, in milliseconds
         );

   if( !pipeRet ) {
          DWORD err = GetLastError();
          ...process error;
   }
} while (!pipeRet);
```

Index

.PLG files, 4
Account number, 37
Addenda Setup, 20
Address verification, 20, 38
Administrative Setup, 22
Agency Access, 10
American Express, 68
Application password, 22
ATM/Debit cards, 1
Auth code, 37
Auth Only (NO DEPOSIT), 36
Authorization Only (NO DEPOSIT), 16
Authorizing a batch, 42, 57
Automatically print receipt, 15
AVS response codes, 21
Bank Audit List, 63
Batch and single authorizations, intermixing, 58
Batch Detail List, 63
Batch List contents, selecting, 56
Batch List Screen, 54
Batch, authorizing, 42, 57
Batch, deleting, 56
Batch, opening an existing, 55
Batches, handling, 53
Baud rate, 11
Birth date, 38
Card Type, 25, 35
Card Types Setup, 18
Changing a transaction, 48
Chargeback rights, 1
Check Guarantee, 17
Check Guarantee Driver's License, 17
Check Guarantee License Authorization, 41
Check Guarantee MICR, 17
Check Guarantee MICR Authorization, 40
Check/License, 25
Check/MICR, 25
Command bar, 44
Communications Setup, 10
Confirm delete batch, 25
Confirm delete or void transaction, 25
Corporate and business cards, 43
Credit card, 25
Credit Card Magnetic Stripe Authorization, 39
Credit Card Manual Entry Authorization, 40
Data directory, 26, 30
Debit ATM, 25
Deleting a batch, 56
Deleting a transaction, 48
Demo mode, 6
Dial type, 11
Direct marketing, 20
Discount amount, 51
Discount rate, 19, 42
Driver's license, 38
Duplicate transactions, forcing, 39
Dynamic Data Exchange, 117
ECHO Network, 72
Entry ttems, 37
Entry mode, 39
Error messages, 64
Expiration date, 2, 37
Exporting transactions, 107
FDMS – Omaha ETC Plus, 81
FDMS – TeleMoney, 83

FDMS Nashville – Envoy, 76
FDMS North – Card Establishment Services, 74
FDMS South – NaBanco, 78
Finding a transaction, 49
Fraud, 2
Global Payment – MAPP, 91
Global Payment – Modular Data, 95
Global Payment – NDC (Host Capture), 87
Hardware Setup, 7
Help, 5
Icons, 5
Importing transactions, 112
Interactive balance, 61
Intermixing batch and single authorizations, 58
Intro Setup, 9
Line descriptions, 37
Magnetic stripe card readers, 7
Mail-order businesses, 20, 33, 43
Merchant Detail, 63
Merchant Setup, 13
Merchant Summary, 63
Messages, printing on receipts, 15
MICR, 38, 40
Modem init string, 11
Modem type, 11
Modems, 7
Multiple Bank Network Plug-in Setup, 32
Multiple Merchant Setup, 29
Named Pipes, 131
Network-specific instructions, 67
Nova, 97
Open batch detail with only pending transactions, 25
Open batch list with only pending batches, 25
Opening an existing batch, 55
Operator ID, 24
Paymentec – Gensar, 85
PC clock, 33
PCAuth folder, 4
PCAuthorize®, installing on hard drive, 3
Per transaction charge, 19
Personal Setup, 24
PIN pad, 8
PIN Pad Setup, 27
Plug-in modules, 4
Point-of-sale merchant, 33
Port, 11
Post authorization, 17, 36
Printers, 14
Private label, 25
Product password, 9
Product serial number, 9
Purchase cards, 43
Receipt messages, printing, 15
Receipt printers, 14
Receipts Setup, 14
Reports, 63
Retail businesses, 42
Retrieval number, 37
Return/Credit, 17, 36
Sale & Deposit, 16, 36
Sale type items, 38
Sales tax, 38
Sales type default, 17
Selecting the Batch List contents, 56
Send, 38
Services Setup, 16
Settlement, 59
Settlement procedures, 60
Settlement types, 59
Setup
  Addenda, 20
  Administrative, 22
  Card Types, 18
  Communications, 10
  Intro, 9
  Merchant, 13, 29
  Multiple Bank Network Plug-In, 32

Personal, 24
PIN Pad, 27
Receipts, 14
Services, 16
Split Dial or Additional Network, 28
Setup files, creating multiple, 29
Setup files, using multiple, 31
Setup menu, 8
Setup password, 22
Shortcuts, 5
Split Dial or Additional Network Setup, 28
Split dial plug-ins, 4
State code, 38
Switch Setup, 30, 31
System requirements, 3
T & E, 25
Take, 38
Tax, 38
Technical support, 5
TELLAN directory, 4
Totals screen, 50
Transact directory, 4
Transaction defaults, 25
Transaction line items, 45
Transaction List, 34
Transaction List screen, 44
Transaction Sale Invoice, 63
Transaction titles, 45
Transaction type, 25, 35
Transaction window navigation techniques, 35
Transaction window, opening, 34
Transactions within batches, handling, 53
Transactions,
changing, 48
deleting, 48
entering, 33, 35
finding, 49
selecting, 47
voiding, 47
Troubleshooting, 64
Unattended operation, 26
VisaNet, 99
Void, 17, 36
Voiding a transaction, 47